

# OLDFIELD, PATTINSON & CO.

WHOLESALE & EXPORT DRUGGISTS,

17 TODD STREET, MANCHESTER.

Sole Proprietors and Manufacturers of the

## "Silver Churn" Butter Colouring,

*A purely Vegetable preparation for giving to Butter, at all seasons, a rich cowslip tint, not obtainable by other means. It is the best and cheapest preparation in the market, and does not crust or deposit like the Danish and American makes, and has the further advantage of being a Home Product. Druggists in the grazing districts will find this a very saleable line. It is sold in bottles attractively got up at*

6d. 1s. 2s. 5s. size  
4s. 8s. 16s. 38s. per dozen.

*less usual 10 per cent. discount. Buyers of £5 worth gross value, which may be assorted to suit their requirements, are put on full wholesale terms.*

*For large Dairies and Druggists who prefer to bottle it under their own name, it may be had in bulk, in 1, 2, and 4 gallon bottles, and 1, 3, and 5 cwt. casks, at special prices, which will be sent on application.*

## THE "SILVER CHURN" ESSENCE OF RENNET.

For the preparation of Devonshire Junkets, Curds and Whey, Cheese Cakes, &c.

This is always uniform in strength, and, as the above-mentioned dietary articles are growing in favour, will command a ready sale.

6d. size, 4s. per dozen; 1s. size, 8s. per dozen; 2s. size, 16s. per dozen.

TERMS AS ABOVE.

## THE "SILVER CHURN" CHEESE RENNET.

A highly concentrated preparation, introduced specially for large Dairies and Cheese Factories, one tablespoonful being sufficient to curdle Twenty-five Gallons of Milk.

Sold in  $\frac{1}{2}$ , 1, 2, 4 gallon bottles and 30-gallon casks, at special prices which may be had on application. The attention of Druggists in the Cheese Districts is particularly directed to this article.

## FLUID EXTRACT OF HERBS (Botanic Extract)

FOR MAKING HERB BEER.

This is a very superior preparation, and is meeting with great success, there being a growing demand for an article of this description during the Spring and Summer Months.

Price in 2-gallon bottles, 1s. per lb. Price bottled, 6d. size, 4s.; 1s. size, 8s.; 2s. size, 16s. per dozen.

Attractively put up with plain labels and metal capsules.

## CUCUMBER CREAM AND GLYCERINE.

1s. 2d. per lb.; 1s. in Winchester Quarts. Inseparable and delicately perfumed.

## APERIENT SUMMER SALINE.

1s. 4d. per lb.; 1s. 2d. in Pottle Bottles. Pleasantly flavoured and will not cake in the bottles.

## CONCENTRATED SOLUBLE ESSENCES.

Prepared specially for Cordials, Aërated Waters, &c., and will mix with Water or Syrup in any proportion without turning turbid

Essence of Capsicum ...	5s. per lb.,	4s. 6d. in Wr. Qts.	Essence of Horehound	3s. per lb.	2s. 6d. in Wr. Qts.
" English Hop	5s.	" 4s. 6d.	" Lemon	3s. 6d.	" 3s.
" Ginger	4s.	" 3s. 6d.	" Orange	3s. 6d.	" 3s.
" Ginger Ale	4s. 6d.	" 4s.			

Buyers of 12 Winchester Quarts and upwards are requested to write for a special price.

PRICE LIST WILL BE SENT ON APPLICATION WITH BUSINESS CARD



# "AGREED AT LAST."

THE Statuette, as drawing below, is effectively produced in Terra Cotta, the likenesses of the two great political leaders being most striking, and their expression clearly shows they have at last found a topic on which no difference of opinion can exist, viz., that "Hockin's Acme Cones are the best."

We shall present this striking group, which is 18 inches high, with all first orders for £2 10s. worth of our

## "ACME" BRAND PURE MENTHOL CONES

(not more than £1 in value to be taken in 1d., 2d., and 3d. Cones.)

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### NEW PATTERNS, SPECIALLY SALEABLE.

No.

\*217r. Glass Show Bottle,  
with foot, as fig. 88, 1/8  
per doz.

\*217A. Glass Show Bottle,  
with foot, as fig. 161, 3/-  
per doz.

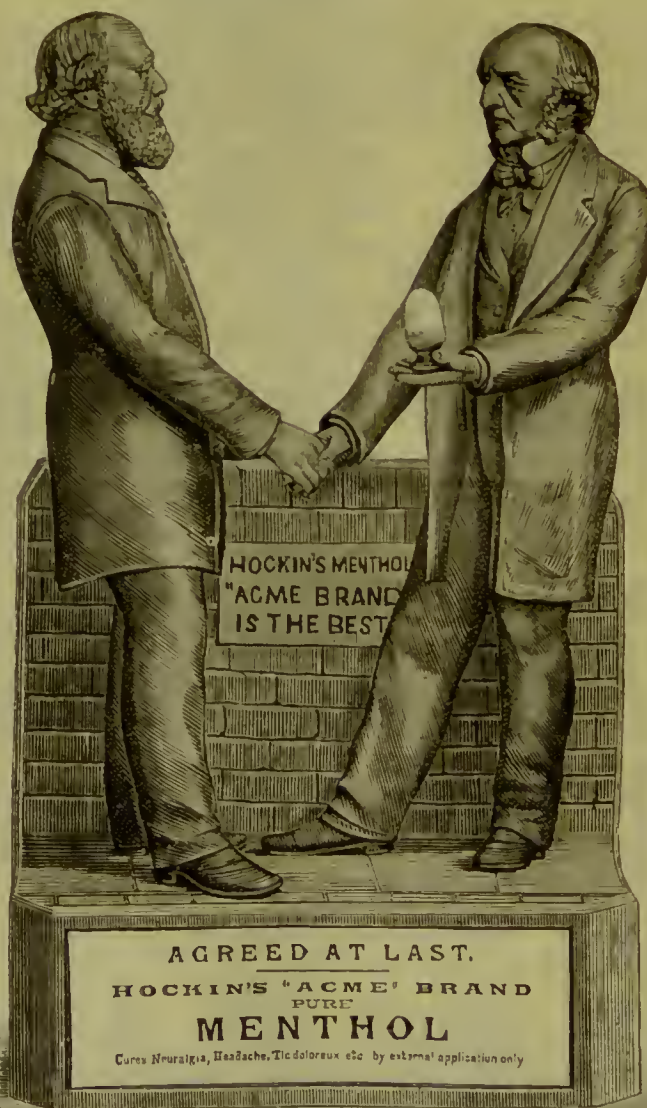
\*214A. Glass Show Bottle,  
with foot, as fig. 161. This  
has a very large Cone. 4/3  
per doz.

220. Cone Shape, as fig. 203  
each in slide box, 1 doz. in  
outer, extra size, 4/3 per  
doz.

\*221. Large Flat Draughts-  
man, very large Cone (120  
grains), 4/9 per doz.

222. Elegantly cut Show  
Glass Bottles, as fig. 222,  
3 cuttings, 9/- per doz.

224. Enamelled Tin Box,  
with Printing on box, 30  
gr. Cone, 1/6 per doz.



### 1d. CONES.

No.

219. Willow Boxes, bottle  
shape, 3 doz. on card, 6/-  
gross.

219r. Willow Boxes, Barrel  
shape, 3 doz. on card, 6/-  
gross.

219A. Willow Boxes, Acorn  
shape, 3 doz. on card, 6/-  
gross.

### 2d. CONES.

202s. Polished Willow Boxes,  
bullet shape, 12/- gross.

201s. Polished Willow Boxes,  
barrel shape, 12/- gross.

206s. Polished Willow Boxes,  
cone shape, 12/- gross.  
2 doz. on card.

### 3d. CONES.

207s. Polished Willow Boxes,  
Draughtsman shape, 18/-  
gross.

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We only quote the most saleable patterns here. Detail of all shapes on application.

We have been informed that a report is being circulated that our Menthol is adulterated, and we will gladly present anyone with a cheque for £10 who will give us evidence that will enable us to proceed against the perpetrator of this false statement.

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"FLETCHERS' CONCENTRATED LIQUORS are valuable and most servicable preparations. We have tested them all. THEIR PURITY AND STRENGTH ARE UNQUESTIONABLE."

What does THE DUBLIN MEDICAL JOURNAL say of them?

"The drugs used in the production of FLETCHERS' CONCENTRATED LIQUORS are of the purest quality, and the strength of the finished product is MOST ACCURATELY DETERMINED and brought to the Pharmacopœial standard."

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"Both in flavour and in medicinal properties FLETCHERS' CONCENTRATED LIQUORS were EQUAL TO THE BEST PREPARATIONS WE COULD PREPARE FROM FRESH DRUGS. By their use all the trouble and annoyance of variety of colour and strength, which is so frequent in our fresh infusions, is avoided, and this, so far as we could trace, without any sacrifice in the therapeutic power of the drug or in the physical characters of the preparation. Indeed, when we consider how much material is wasted in preparing the fresh infusions and tinctures, WE RECOMMEND THESE ADMIRABLE PREPARATIONS, not only on account of their potency and convenience, but also on account of their economy. THEY ARE A VERY DISTINCT ADVANCE IN PHARMACY, and incomparably superior to the one-to-seven infusions which did so much to bring concentrated preparations into disrepute. No physician need hesitate to prescribe infusions made from these liquors. THEY ARE INDISTINGUISHABLE FROM THE MOST CAREFULLY PREPARED OF THE FRESH PREPARATIONS, AND THEIR EQUAL IN POTENCY."

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In consequence of the **FIRE** on their Premises in **ST. ANNE STREET, LIVERPOOL**, on night of June 15 last,

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PASS LIST FOR APRIL.

### MAJOR.

Mr. C. F. SYMES, Liverpool (first attempt).

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*Syllabus, Pass Lists, Fees, &c., sent free on application to the Principal.*

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Assistant Physician to St. John's Hospital for Diseases of the Skin.

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Miscellaneous.

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2.—LONDON SUBURB, WEST.—Dispensing, Retail and Prescribing Business; returns about £550; rapidly increasing; double-fronted corner shop; good stock; comfortable house, low rental; price £450.

3.—LONDON, N.—Prescribing and Retail; situated in a thickly-populated locality; returns over £400 yearly, *net profit nearly half*; corner shop; rent low; price £350, or reasonable offer considered.

4.—LONDON, N.W.—Retail and Prescribing Business; been conducted as a Branch; managed entirely by an assistant; returns nearly £650; good prices; handsomely-fitted shop and good stock; commodious house and garden attached; about £450 required.

5.—KENT.—Retail and Prescribing of good-class (unopposed); returns nearly £600; *net profit* £250; well-fitted shop and large stock, at low rental; convenient house, good garden attached; about £600 required.

6.—HOME COUNTY.—Retail and Dispensing of good class; situate in attractive locality; returns nearly £700, *with good profits*; large shop, well stocked; convenient house, &c.; about £650 required.

7.—EASTERN COUNTIES.—Mixed Business; returns last year £2,000, increasing; large well-fitted shop and good stock; small premium only and valuation required.

8.—SOUTH-WEST OF ENGLAND (Seaside).—Good class Retail and Dispensing Business; held by vendor 12 years; returns nearly £550, *with good profits*; large 10-roomed house; every investigation permitted; vendor, having purchased a larger business, will deal liberally with an immediate purchaser.

9.—NORTH DEVON.—Country town; good-class Retail, Dispensing, and Prescribing; returns £450 yearly, increasing; satisfactory reasons for selling; opposition slight; rent £20; price £300.

10.—SOUTH WALES (Seaport).—Retail and Dispensing; well-fitted single-fronted shop and good stock; moderate rent; returns nearly £500, capable of being much increased; vendor, being anxious for an early sale, will accept £350.

11.—YORKSHIRE.—Large manufacturing town; good-class Retail and Light Family Business; returns about £1,000 yearly; large handsome shop and good stock; commodious house, rent £55; large flower and vegetable gardens, stable, and warehouse; about £800 required.

12.—OXFORDSHIRE.—Mixed Business, Post-office attached; returns about £2,000 yearly; business capable of being much increased; well-fitted shop and good stock; reasonable offer accepted.

13.—SOMERSET.—Very old-established Business for disposal, in consequence of vendor's ill-health; returns over £1,100 yearly, *profits more than the average*; a prompt purchaser required, terms liberal; particulars on application.

14.—WILTS.—Mixed Business; returns nearly £1,300 yearly; large and commodious premises; good house and garden; about £1,100 required.

Particulars of any of the above will be furnished on application.

N.B.—NO CHARGE TO PURCHASERS.

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ON MONDAY, 21st July, at 1 P.M., the excellently appointed and thoroughly well fitted CHEMICAL WORKS, situated at No. 4, Rue de l'Est, in the town of

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a short distance by rail from Paris, will be offered for SALE at AUCTION, on behalf of the present Proprietor, by Maître G. ROBIN, Notary Public, 62 Boulevard Sébastopol, Paris, of whom full particulars may be obtained.

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A JACCIO, CORSICA.—To be Sold or Let on long lease, property of 60 acres, with pleasure-grounds and park, three substantial houses, wine-cellar, stabling (5 horses), and coachhouse; extensive orange, lemon, and cedar groves, well planted with fruit-trees of best varieties; abundant water and complete system of irrigation; two acres of wire-fenced poultry run; large farm of flowers and scented shrubs and herbs for the manufacture of essential oils and perfumes; distillery worked by steam, and complete modern installation in full work. Address, N. Y. I., care of Messrs. B. Bradshaw & Co., Imperial Buildings, Ludgate Circus, London.

TO Chemists Fitting up or making alterations.—The entire fittings of a Chemist's shop, £45.—Drawers, Counters, Show-cases and Carboys, &c.—For Sale, also 12-ft. range new mahogany drawers, with plate-glass labels and knobs, £9; one 12-ft. ditto, pine drawers, gold labels and glass knobs, £6 12s.; one new bent tooth-brush case, 25s.; three 3-gallon, 9s. 6d.; four 4-gallon, 12s.; and three 6-gallon carboys, 15s. 6d. each; 180 shop rounds and jars, gold-labelled, £9; plate-glass counter show-case, 36 x 18, 35s.; 6-ft. dispensing-screen, mirror centre and marble slab, £5 10s.; ditto, new design, £7 10s.; good beat-front brush-case, 21s.; mahogany wall case, 60 x 47, 55s.; 24 2-lb. blue jars, labelled, 36s.; 12 3-lb. ditto, 24s.; 12 4-lb. best pink ditto, labelled, 5s. each; 6-ft. beat-front case, good secondhand, £4 10s. R. Tomlinson & Sons, Medical Fitters, Bond Street, Birmingham.



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**BUSINESSES THOROUGHLY INVESTIGATED FOR BUYERS. 20 YEARS' EXPERIENCE.**

**LANCASHIRE.**—Returns £1,700; General Retail and Prescribing, with fair Dispensing; price about £800.

**BIRMINGHAM.**—Returns over £600; Retail, Dispensing, and Prescribing; rent £30, lease; price 475.

**YORKS.**—Branch; returns £600; General Retail and Prescribing; price £350.

**STAFFS.**—Prescribing and Retail; returns about £500, fully one-half profit; price £250.

**MIDLAND.**—Unopposed Retail; 3,000 population; returns £350, one-half net profit; large garden, fruit nearly pays rent; price £270.

**KENT.**—Returns £400; very profitable; price £350.

Mr. Brett has buyers of good-class Businesses, returning £1,000 to £2,000. Vendors can at once be supplied with cash buyers.

## BUSINESSES FOR DISPOSAL.

*Advertisements for Businesses for Disposal, &c., to appear in our Special Summer Issue of 11,000 copies, to be published on the 26th inst., should reach us not later than Thursday afternoon, the 24th inst., otherwise we cannot guarantee the insertion of same.*

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**A CHEMIST'S** Business, in the best position of a good market town in Middlesex; established over 30 years; rent £32. For further particulars address S. C., 20 High Street, Uxbridge.

**NORTH LONDON.**—For sale, price £450; Prescribing and Retail; in present hands many years; good lease; low rent; house good. G., care of Messrs. Hill & Son, 101 Southwark Street, S.E.

**A CASH** Retail and Prescribing, capable of much increase; good position, centre of London; easy terms of purchase (small deposit, remainder by instalments). "Beta," care of Barclay & Sons, 95 Farringdon Street, E.C.

**EAST LONDON.**—For disposal, through failing health, an old-established Retail; main road; never changed hands; price £300, lease, stock, &c.; capable of improvement. Address, W., 101 Southwark Street, S.E.

**GOOD** Mixed Country Business, in market town in Norfolk; central position; convenient house and premises; rent low; returns about £1,100; price £700 or valuation. For further particulars apply J. Maltby, Chemist, Lincoln.

**DEWSBURY**, Yorkshire.—For immediate disposal, through death of proprietor, well-established Dispensing and Retail Business; first-class position, exceptional opening for young man; price very reasonable; particulars on application. Address, Peel, 20 Swindon Road, Dewsbury.

**FOR** Disposal, in the busiest part of the S.E. district, a Business returning upwards of £1,300 annually. net rent exceedingly low; lease 7 years to run; renewal can be had; net profits between £350 and £400. Apply to "Y. Z.," care of Wright, Layman & Unney, 50 Southwark Street, London, S.E.

**OLD-ESTABLISHED** Business; age cause of disposal; shop double-fronted, well fitted and stocked; cash trade; populous locality; valuable proprietary medicines; terms liberal; on personal application only. Address to C. M. K., Miss Atkinson, 40a King William Street, London Bridge, E.C.

**LANCASHIRE**, manufacturing market town.—Retail, Prescribing Country Business, centrally situated, to be sold at a sacrifice: valuation of stock and fixtures about £250; returns about £350; rent £40; trial allowed. Write, "Rondeletin," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**BUSINESS**, in market town 12 miles from London, very much neglected and mismanaged, has fallen into hands of relative of late proprietor, and is for sale at nominal sum to rid responsibility; capital chance for young man with small capital, or as Branch; rent nearly all let off. Mr. Baker, 174 Victoria Street, S.W.

**£160.**—Small Retail, Dispensing, and Prescribing Business, in North London; nice locality; very little opposition; favourable lease at £50 per annum, more than half let off; returns could be doubled in six months by owner's management. C. A., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**HAMPSHIRE.**—For sale, a Dispensing, Prescribing, and Light Retail Business, in a good, prosperous town; returns nearly £1,000; exceptionally good profits; good house, garden; moderate rent; same hands many years; price £700, or offer; principals only. "Crota," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**FOR SALE.**—An old-established Country Business; first-class Dispensing, Prescribing, and Retail, with Seeds; no oils or other heavy trade; good prices; increasing returns, at present £800; convenient premises at low rent. Apply "Chemist," care of Mr. Bingham, 106 Cotham Road, Bristol.

**£1,500.**—In fashionable inland town, in high public favour, best-class Dispensing and select Retail, with exceptionally good Proprietaries; rapidly increasing; satisfactory reasons for disposal; references required and given. Apply to M. P., care of Hearon, Squire & Francis, 38 Southwark Street, London, S.E. No Agents.

**£70 WILL** buy the fixtures and a small amount of the stock of an old-established, unopposed, profitable little Business near Birmingham; fixtures only £50; a capital chance for a beginner, proprietor having bought another business. Particulars from M.D., care of Southall Brothers & Barclay, Birmingham.

**GOOD** Country Business for disposal, centre of High Street; all Prescribing and Light Retail; no heavy trade; good prices, increasing returns, at present about £400; convenient premises at low rental, large garden; every investigation; trial allowed; cash price £250; a bargain. J. Cole, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**£1,150.**—Genuine Retail, Prescribing and Agricultural Business, in a large town in Kent; average returns for last 3 years exceeding £1,000; best position in town; rent £80, on lease (14 years); 6 bedrooms, 2 sitting-rooms, kitchen; several valuable proprietary articles. Thompson, Chemist, Camden Road, Tanbridge Wells.

**NORTH OF ENGLAND.**—Branch Retail (neglected), corner shop; busy thoroughfare, centre of large manufacturing town, agricultural district; well situated for doing good Prescribing business; returns £3 to £4 per week; rent £30; price, stock and fixtures, £70. Write, "Cochineal," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**BIRMINGHAM.**—Chemist's Business and Dental Practice for disposal; owner retiring; large corner shop, and good house; private entrance for dental patients, operating and waiting rooms; low rent; could be worked together or separately; main road; large traffic; populous neighbourhood; no agents; price about £350. Address, L. D. S., 162 Aston Road, Birmingham.

**WORCESTERSHIRE.** Advertiser wishes to sell his Light Retail Business, in town of 6,000 inhabitants; returning £850; net profit nearly £400 after deducting all expenses; good house and garden; cash price £500; will give month's introduction; first time offered. Genuine applications only to "Kino," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**£300.**—**SURREY.**—Light Retail; large increasing neighbourhood, main road; nicely-fitted shop; 5 rooms, cellar, garden, side entrance; returns £4 10s. weekly; may be greatly increased under personal management; good opening for dentistry; rent £32; advantageous lease; no agents. Address "Opal," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**SUBURBAN DISPENSARY.**—A capital opportunity for young doctor; small premium; lately carried on under management; with proper attention, a large practice at once; good position, corner premises, main road; rent £50, with use of fittings, &c.; six rooms, large waiting and consulting rooms, dispensary, &c. Apply, Tomlinson's Estate Office, High Road, Stamford Hill, N. near Dispensary.

## WEST KENSINGTON.

**MESSRS. BERDOE & CO.** are instructed by the Proprietor (who is going abroad) to Sell by Tender the old-established and unopposed Light Retail, Dispensing, and Prescribing Business which he has for 10 years successfully conducted at 65 Blythe Road, Brook Green, W.; returns are £700 yearly, very few patents; low rent, on lease, 8-roomed house, private entrance; stock and fixtures are of the estimated value of £350. Buyers seeking a business of this size should see it at once, as it will be sold a bargain, a very low reserve being fixed, offering a rare opportunity to any young man wishing to commence business with about £350. Tenders received by us at our offices up to Thursday, the 24th day of July.

Full particulars and form of Tender on application to Messrs. Berdoe & Co., 30 Jewry Street, Aldgate, E.C.

## BUSINESSES WANTED.

**WANTED**, in a good market town, a Business returning from £900 to £1,200. Charles, 9 Bird Street, Oxford Street, London, W.

**WANTED**, a good Retail and Dispensing Business, returning about £600 per annum; capital at command. W. Puckey, High Street, Ramsgate.

**A CHEMIST'S** Business, thoroughly sound, and must bear the strictest investigation; moderate price. Full particulars to Ernest Ratfield, 1 West Mall, Clifton, Bristol. West of England preferred.

## PARTNERSHIPS.

**ADVERTISER** is open to enter into Partnership with a firm manufacturing well-established Proprietary Article, and wishing to extend. Strictest investigation to be offered, and every particular, in confidence, to 132/17, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**EXCEPTIONAL** opportunity.—Partner wanted, prepared to invest at least £500, to extend a well-established and successful Chemist and Druggist's Business in Manchester; returns doubled every 12 months during last 3 years; two original medicinal specialities of great value and growing demand. Hemingway, Higher Chatham Street, Manchester.



## APPRENTICESHIP.

**APPRENTICE.**—A Vacancy for a well-educated Youth as an Apprentice in a good-class Retail and Dispensing Business; small premium required. Apply C. J. Price, Chemist, Walthamstow.

## SITUATIONS OPEN.

*Advertisements of Situations Open to appear in our Special Summer Issue of 11,000 copies, to be published on the 26th inst., should reach us not later than Thursday afternoon, the 24th inst., otherwise we cannot guarantee the insertion of same.*

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**IMPROVER** or Junior, in good-class Country business; good address at the counter a necessity. E. Wigbman Bell, F.C.S., Spalding.

**WANTED**, immediately, an Improver or Junior (indoors). Apply, stating full particulars, to R. Driffield, Agricultural Chemist, Spilby Lincs.

**WANTED**, a qualified Assistant; no night or Sunday work; state salary required. Apply, Philip Harris & Co. (Limited), Wholesale Chemists, Birmingham.

**INVOICE** Clerk for Wholesale, with knowledge of drug trade. Apply, stating experience, &c., to I. C., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**MESSRS. J. FLOYD & CO.**, Bury St. Edmunds, are in immediate want of a Junior or Improver for General work; applicants will please send full particulars.

**WANTED**, a Junior Invoice Clerk; one who is accustomed to office work. Apply by letter, stating salary required, &c., to R. Sumner & Co., 50A Lord Street, Liverpool.

**RELIABLE**, quick, and energetic Junior Assistant; one accustomed to a Mixed business preferred. Apply, with usual particulars, to Frederick T. Patman, Whitehaven.

**IMMEDIATELY.**—Indoor Assistant, qualified for West-end business; good address and first-class references indispensable. Apply, C. E. O. Letts, late T. O. Sandell, West Kensington.

**IMMEDIATELY.**—A good Junior Assistant, accustomed to light Retail and Dispensing business. State age, height, salary, reference, no enclose photo, to John Lea, Folkestone.

**R. BESSANT**, Westgate-on-Sea, requires a thoroughly trustworthy qualified Assistant, of good address; must be a quick and able Dispenser. In applying, state height and enclose carte.

**IMMEDIATELY**, an Assistant of good address and Dispensing experience; tall and not under 21; if by letter, state full particulars, but personal interview preferred. D. 20 Wigmore Street, Cavendish Square, W.

**WANTED**, Junior Assistant for General Country business; board in, but bedroom provided out of house; two assistants; must have character. Particulars, with portrait, &c., to Tomlinson, Obelmsford.

**WANTED**, a qualified Assistant of good business habits. Applicants will please state age, references, and salary required, also enclose photo (which shall be faithfully returned), to W. H. Solomon, Chemist, Barnstaple.

**WANTED**, Chemist's Manager, to live on premises; must be married, qualified, good prescriber, tooth extractor, good counterman; to a successful man this would lead to an interest in business. P., 10 Hawksley Street, Southport.

**MESSRS. THOS. G. STONHAM & SON**, Maldstone, have a vacancy for a qualified Assistant as Dispenser (indoors). Apply by letter, stating age, height, qualification, experience had, and salary required; send photo, to be returned.

**Assistant** (indoors), 23 or 24; experienced Counterman; good address, active and agreeable manners; enclose carte; no objection to work from a good country house; indoors; comfortable home; half-day pay. E. J., 38 Southwark Street, S.E.

**COMFORTABLE** Home is offered to relative of Chemist, cheerful disposition, domesticated habits, willing to assist in household; delightful neighbourhood, near London; no family; moderate salary. Address, A. B., Messrs. Hill & Son, Southwark Street, S.E.

**MESSRS. WILLIAMS & CO.**, Chemists, 7 Park Hall Buildings, Queen's Road, Cardiff, require immediately two smart Junior Assistants for retail counter, who can be well recommended by their last employers. State age, height, salary (outdoors), and when disengaged.

**IMMEDIATELY.**—Qualified Assistant wanted in a first class French business; must be a quick and accurate Dispenser; not under 25; height of French and good references indispensable. Send photo and references, age, experience, salary, "Aristol," Bureau Restant, Poste Paris.

**WANTED**, an Assistant with good experience, by about August 12, for good-class Retail and Dispensing business; one with Minor qualification and able to Prescribe and Extract Teeth preferred. Apply, full particulars, enclosing photo and references, to G. H. Lodge, Chemist and Dentist, Rotherham.

**WANTED**, immediately, Junior or Improver in good-class business. State salary and usual particulars to Oliver, Chemist, West Malling, Kent.

**RELIABLE** and Permanent Branch Manager wanted; not under 30. Photo, with explicit particulars of experience, &c., to A. Hagon, Chemist, Cardiff.

**WANTED**, a Qualified Assistant to take charge of a business in suburbs; salary and commission. Address, "Statim," 141 Fairfax Road, Hornsey, London, N.

**WHOLESALE** Druggists want a Junior Clerk; unexceptionable references indispensable. Apply to Langton, Hicks Bros. & Co., 30 Wilsen Street, Finsbury.

**TRAVELLER** required, calling upon Chemists, to sell on commission an article that will be freely taken up. Apply, stating towns visited, to "Advt.," 65 Bath Street, City Road, E.C.

**FOR JAPAN.**—Qualified English Assistant; about 25; first-class London experience and references indispensable. Apply by letter to Dakin Bros., Creechbrook Lane, Leadenhall Street, London, E.C.

**IMMEDIATELY.**—An Outdoor Assistant for the Dispensing Counter; salary to commence at £90. Apply, with photo, stating age, height, and experience, to E. J. Kitson, The City Drug Stores, Worcester.

**WANTED**, a Junior Dispenser for August and September in surgery; hours 1.30 to 2.30 and 5.30 to 9.30; salary 15s. 6d. weekly; outdoors. Apply, 101 Northcote Road, Clapham Junction.

**MANAGER** wanted, Minor qualification, for a good-class business in Midlands; unexceptionable references required. Full particulars, references, and salary required (indoors), to Wyleys & Co., Coventry.

**A QUALIFIED** Assistant wanted, for about Twelve Days, to Manage business during absence of principal for holidays; age about 30; state experience, references, &c., and enclose carte. W. Worsley, Chemist, Wigan.

**IMMEDIATELY**, a good Junior Assistant, not under 20 years (indoors); light trade; time for study. Apply, stating previous experience, references, salary required, enclosing C.D.V., to W. Jacobs, Medical Hall, Guildford, Surrey.

**LOCUM-TENENS** or Permanency; qualified Assistant for a month from August 1, during absence of proprietor; if mutually satisfied a permanent engagement might be arranged; comfortable home. C. J. Park, Ph. Chemist, Plymouth.

**WANTED**, Junior Assistant, also an Improver, used to a country trade. Write, stating full particulars as to experience, references, and salary required, to H. S. Martin, Chemist and Mineral Water Manufacturer, High Street, East Grinstead.

**WANTED**, for the country (Scotland), to take charge, a smart pushing young man of good address; qualified preferred; exceptional references as to sobriety and honesty; salary to begin, £90 per annum. James Taylor, 132 Trongate Street, Glasgow.

**OUTDOOR** qualified Assistant wanted for good country business; hours short, and no Sunday duty; please state age, height, salary required (outdoors), together with references from last employer, also when disengaged. E. G. Carrington, Chemist, Bakewell.

**INVOICE** and Correspondence Clerk wanted by leading house of Wholesale Druggists and General Merchants in Dublin. Reply, in own handwriting, stating salary expected, and enclosing copies of testimonials, L., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**GOOD** Junior wanted by July 27; Light Retail and Dispensing; one accustomed to Post Office duties preferred; most satisfactory references required. Apply, stating experience, references, salary required (indoors), age, height, and enclosing photo, to G. F. Lemmon, Chemist, West Hill, Hastings.

**IMMEDIATELY.**—A permanent qualified Manager, for Yorkshire; must be a good Prescriber and Tooth-extractor; a total abstainer preferred; send photo and particulars, including age, height, reference, and salary required (outdoors), to "Deutline," care of Messrs. Evans, Sons & Co., Hanover Street, Liverpool.

**PARIS.** Immediately, an active and experienced Counterman (seeking a permanency and speaking French fluently) for a high-class Retail establishment; must be tall and of good address; liberal salary. Apply by letter, with photo (to be returned), to A. B. O., care of Messrs. Maw & Son, Aldersgate Street, London.

**FOR CAPE COLONY.**—Wanted, German gentleman, who must have passed German Assistants' Examination, about 24 years of age, good Dispenser, and speaking English, for first-class business in healthy coast town. Send particulars to "Export," S. Maw, Son & Thompson, 11 Aldersgate Street, London, E.C.

**ASSISTANT** wanted (Minor); send full particulars of experience, salary (outdoors), age, married or single, abstainer or otherwise, references; applications not answered in seven days declined. Address, "Mixed Business," Yorkshire Manufacturing Town, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**ASSISTANT** in Charge wanted for branch business; good class of trade; must have Minor qualification, be of good address, a good and neat Dispenser and Prescriber, and able to Extract Teeth; about 25 to 30 years of age; board and lodge on premises; south coast. 131/40, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**DRUGS** and Patent Medicines (Wholesale).—Wanted, a smart young man, acquainted with this trade, and capable of taking a leading position in a large house, either indoors or out; a comfortable situation, with a yearly increasing salary. Address, with age, experience, and salary required, to "Regal," care of Rowland & Sons, Hatton Garden, London.



**WANTED**, Qualified Chemist, not under 25, good experience and address, for light Retail and Dispensing business (Midlands); must be good Dispenser and Pharmacist, and competent to take entire management in absence of proprietor. References and photo to B. C., Messrs. Evans, Lesclier & Webb, 60 Bartholomew Close, London, E.C.

**MANCHESTER**.—Wright & Barnaby, Pharmaceutical Chemists 223 Oxford Street, require an indoor Assistant, about 24 years of age, with Minor qualification; must have had experience in a good Dispensing business; two assistants and an apprentice kept; state age, height, salary, when at liberty, and enclose carte. Apply to Mr. Barnaby.

**TRAVELLER**.—A well-educated man, about 28, of good appearance and address, to call chiefly on professional and scientific men, to introduce drugs and preparations, surgical and scientific instruments; must have had a good and varied commercial and scientific training and experience; to save time and useless correspondence, applicants will please furnish the following details:—Age, married or single, where and with whom apprenticed, if attended any college or school of science or pharmacy, full details of name of employer, town, and duration of each situation in which experience has been gained, salary required, references, whether seeking a permanent engagement; replies which do not furnish particulars as above will be disregarded. Address, X. Y., care of Messrs. Horner & Sons, Mitre Square, Aldgate, London, E.C.

## SITUATIONS WANTED.

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1s. for twelve words; 6d. for every six words beyond.

**SITUATION** wanted at wet or dry counter (24). W., 92 Copenhagen Street, N.

**JUNIOR** (22); town and country experience. "Statim," 41 High Street, Stoke Newington.

**AS** Assistant; qualified; aged 24; London or country. "Chemists," Hooper & Co., 55 Grosvenor Street, W.

**AS** Dispenser, &c.; excellent testimonials; in or out door; aged 23. J. C. W., Montpellier House, B. Salterton, Devon.

**ASSISTANT**; aged 23; first-class references; 8 years' good experience. C. U., 8 Canton Street, Southampton.

**WHOLESALE** Drug or Sundries.—Young man seeks situation. "Idoneus," 41 Woodville Road, Walthamstow.

**JUNIOR**; aged 20; good reference; high-class experience. Apply, F. Major, care of C. Lande, Fore Street, St. Ives, Cornwall.

**LOCUM-TENENS** during absence; long experienced; gentlemanly address; moderate terms. "Ph. Ch.," 39 Powis Square, W.

**ASSISTANT**, aged 26, experience chiefly homœopathic, wishes more allopathic experience. Andrews, 149 Marylebone Road, N.W.

**AS** Temporary, or otherwise, or Surgeon's Dispenser (outdoors); aged 29; disengaged shortly. "Statim," Jubilee Nursery, West Malling.

**ASSISTANT**, in Manchester; permanent; 7 years' varied experience; aged 21; disengaged. Duncan, 12 Wellesley Terrace, Newcastle-on-Tyne.

**AS** Assistant; aged 23½; height 5 ft. 8 in.; can prescribe and extract; good experience; outdoors preferred. G. Bott, 5 Market Street, Wisbech.

**ASSISTANT** or Dispenser; 23; 14 years' first-class experience; London preferred; salary moderate. "Seulor," 40 Market Street, Blackpool.

**BRANCH** Manager (three managed successfully); 20 years' varied experience; qualified; married; reliable; sober. "Statim," 7 Albert Square, Stepney, E.

**TRAVELLER**, good house; or Manager, light retail; 20 years in business; South preferred; Major. 133/21, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**GENTLEMAN** having Offices in Edinburgh, calling on Wholesale Chemists, open for a first-class Agency; can give security. "Chemist," Mrs. Scott, 31 Broughton Place, Edinburgh.

**JUNIOR** (19); highest references; knowing Spanish and French; one year's practice at M. Cazius, near Grands Boulevards, Paris; in a first-class London Retail. Apply to A. Urcelay Martinez, care of Messrs. A. A. Morlet & Co., St. George's House, Eastcheap, E.C.

**W. KEMP & SON**, Horneastle, wish to obtain a Position for a capable, trustworthy Man of 35; has not been brought up to the trade, but has been manager in large factory; well educated; not afraid of work; excellent references; salary not so much an object as permanency. Address as above.

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# IMPORTANT TRADE-MARK JUDGMENT

HOUSE OF LORDS APPEAL, June 19, 1890.

Present: The Lord Chancellor, and Lords Watson, Herschell, Macnaghten, and Morris.

**ENO V. DUNN.**

This was an appeal from a judgment of the Court of Appeal reversing an order of Mr. Justice Kay, which was in favour of DUNN, the Respondent. The Appellant, ENO, was the registered owner of the trade mark "ENO'S FRUIT SALT," which he first brought out in 1873. The Respondent described his preparation as "Dunn's Fruit Salt Baking Powder." In accordance with the decision of the majority of their Lordships, the judgment of the Court of Appeal was reversed with costs (in both courts), and the decision of Mr. Justice Kay restored.

## CAUTION.

# ENO'S "FRUIT SALT."

For the Protection of the Trade and ourselves we are compelled to give notice that we will immediately instruct our Solicitors to proceed against anyone infringing our rights or attempting any colourable imitation of our Labels or Wrappers.

June 24, 1890.

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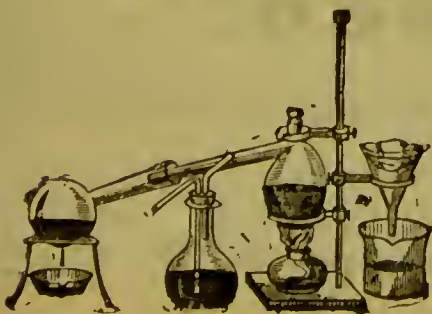
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OF

# THE CHEMIST AND DRUGGIST

TO BE PUBLISHED ON

## JULY 26, 1890,

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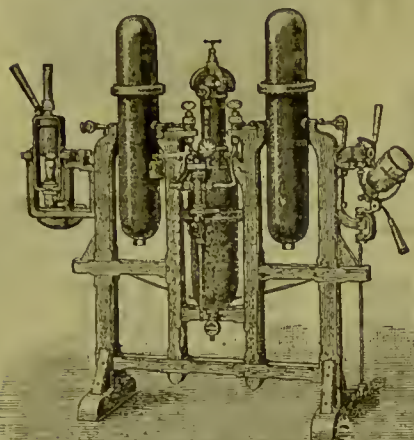
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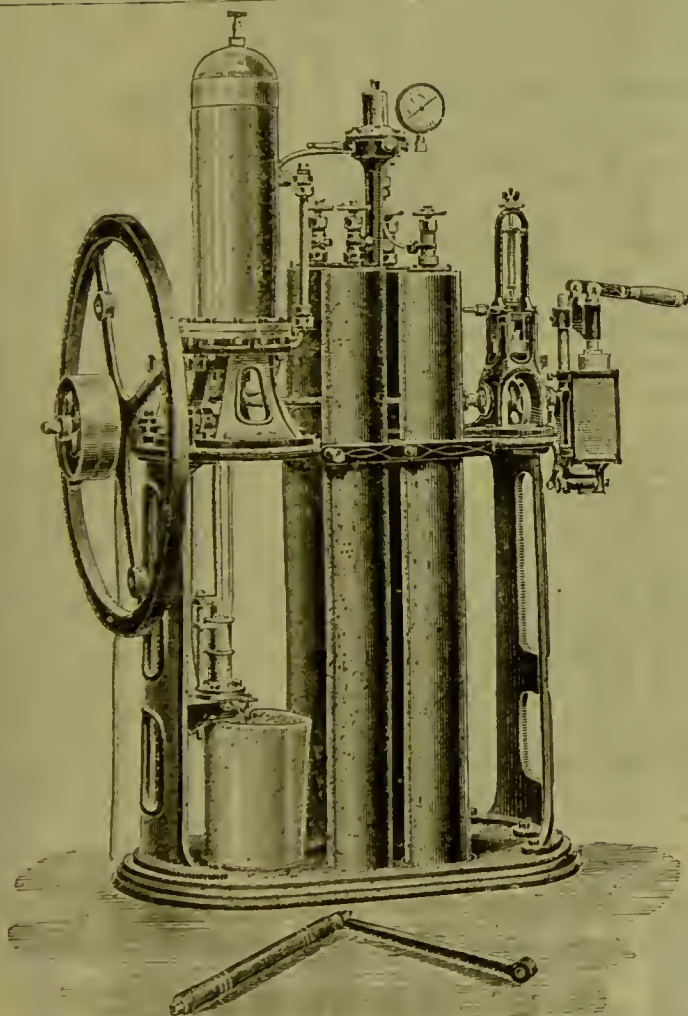
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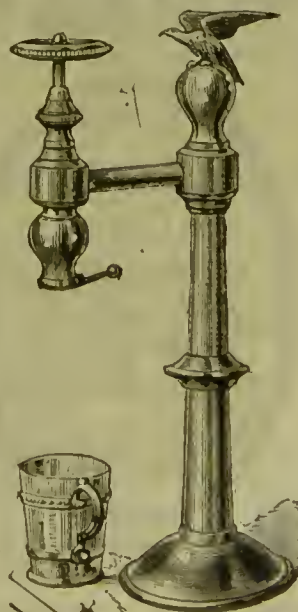
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WRITE FOR NEW ILLUSTRATED CATALOGUE, POST FREE.

## BRATBY & HINCHLIFFE, LIM.

Aerated Water Engineers and Glass Bottle Manufacturers,

SANDFORD ST., ANCOATS, MANCHESTER,

And at 146 MINORIES, LONDON, E.C.



EIGHT PRIZE MEDALS AWARDED

**GOODALL'S  
HOUSEHOLD  
SPECIALITIES.****YORKSHIRE RELISH.**

Most Delicious Sauce in the World. Bottles, 6d., 1s., and 2s. each.

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The Best in the World. 1d. Packets; 6d., 1s., 2s. and 5s. Tins.

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One 6d. Tin is equal to 25 eggs. In 1d. Packets; 6d., 1s., 2s. and 5s. Tins.

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Delicious Custards without Eggs. In Boxes, 2d., 6d., and 1s. each.

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Delicious Blancmange in a Few Minutes. Boxes, 6d. and 1s. each.

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Best Tonic yet Introduced. Bottles, 6d., 1s. and 2s. each.

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Makes the Best Ginger-Beer. Packets, 3d. and 6d.

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For Painting Stoves, Grates, Iron, Tin, &amp;c. 6d. and 1s. Bottles

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A Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. each.

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For Polishing and Cleaning all Metals. Boxes, 6d., 1s. and 7s.

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Make a Delicious and Nutritious Jelly. In ½-pint, 1-pint, and Quart boxes, 3d., 6d., and 1s. each.

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**PATENT MEDICINES  
AND  
DRUGGISTS' SUNDRIES.**

Monthly Price List of Patent Medicines, Druggists' Sundries, &amp;c., will be sent post free on application to

**GOODALL, BACKHOUSE & CO., LEEDS.****A WONDERFUL SUCCESS!!****NON-INTOXICATING BEER**

Made from MASON'S Original

**EXTRACT of HERBS**

(REGISTERED.)

Composed of Yarrow, Dandelion, Comfrey, & Horehound  
ENLARGEMENT OF SIZE.A Sixpenny Bottle makes EIGHT GALLONS of  
**HERB or BOTANIC BEER**

A NON-INTOXICATING BEVERAGE

Full of Body and Flavour, with a Creamy Head like Bottled Ale, the most perfect substitute for Alcoholic Drinks ever discovered, for either Summer or Winter.

**BEWARE** of mean and fraudulent imitations.**BEWARE** of others copying our title.**MASON'S** is the original and only genuine.**MASON'S** is a Special Compound entirely from Herbs.

NO OTHER EXTRACT MAKES BEER LIKE IT.

Sold in Bottles at 6d., 1s., &amp; 2s. each, with directions.

**MASON'S WINE ESSENCES**

Make Temperance Wines in a few minutes.

Ginger, Orange, Lemon, Raspberry, Black Currant, &amp;c.

These are having a very large sale now, and are extensively advertised.

Sold in Bottles at 6d., 1s., and 2s. each.

Quotations on application.

SOLE INVENTORS &  
MANUFACTURERS:**NEWBALL & MASON,**  
Manufacturing Chemists and Botanic Druggists. NOTTINGHAM**DURBAN,****NATAL.****THE NATAL DRUG CO., LD.**

(Late Bentley &amp; Vanderpump),

**WHOLESALE DRUGGISTS,  
IMPORTERS, AND MANUFACTURING CHEMISTS.**AGENCIES undertaken for the Sale of  
PROPRIETARY ARTICLES, and other Goods suited to the  
SOUTH AFRICAN MARKETS.

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Telegraphic Address—"REPOSNOS LONDON."

**DURBAN,****NATAL.****GRANULAR EFFERVESCENT  
CITRO TARTRATE**

KNOWN AS

**CITRATE OF MAGNESIA**

			No. 2.	No. 1.
1-lb., 2-lb., and 4-lb. Bottles	...	per cwt.	69/	80/
"	"	per lb.	8	9
1/ Bottles	...	per doz.	4/9	5/
1-lb. Tins	...	"	9/	10/6
2-lb. Tins	...	"	17/	20/6

1-lb. Bottles, 2d.; 2-lb. Bottles, 4d.; 4-lb. Bottles, 8d.  
charged and allowed for when returned.**CHAS. SOUTHWELL & CO., Dockhead, S.E.**

GENERAL PRICE LIST ON APPLICATION.



**1ST.—COMPARE**

DE CARLE'S SOLID FRUIT JUICES or RIPE FRUIT DRINKS  
with Ready-made Bottled Syrups.

<i>PRO.</i>			
1 packet De Carle's Fruit Juice, retail price	...	...	4½d.
1 lb. Sugar	...	...	2d.
½ pint Boiling Water	...	...	—

*Result—*

1½ pint superb Fruit Syrup, unequalled in flavour, for 6½d.

<i>CON.</i>			
1½ pint Bottle Fruit Syrup at retail price	...	1s. to 1s. 3d.	

**2ND.—DECIDE**

as to the Quality and Purity of DE CARLE'S SOLID FRUIT JUICES.

*ANALYTICAL REPORT by ARTHUR HILL HASSALL, M.D. Lond.,  
Author of 'Food: its Adulterations, and the Methods for their Detection.'*

CHEMICAL LABORATORY, LONDON, April 2nd, 1890.

At the request of Messrs. De Carle & Son, Norwich, we have analysed samples of the Solid Fruit Juices supplied by them. Seven samples in all were tested—Raspberry, Orangeade, Lemonade, Pineapple, Cherry, Gingerade, and Limetta.

The results of the analyses have been perfectly satisfactory, as showing that these preparations are free from injurious or deleterious constituents, and that they have been carefully made from pure materials. Used according to the directions supplied, these various Solid Fruit Juices will furnish Syrups, Jellies, &c., of agreeable and wholesome characters.

*Signed*

ARTHUR HILL HASSALL, M.D. Lond.  
EDW. GODWIN CLAYTON, F.I.O., F.C.S.

*The CHEMIST AND DRUGGIST says—*

MESSRS. DE CARLE & SON, of Norwich, prepare a real fruit salt, under the title of De Carle's Ripe Fruit Drinks, by which the flavours of the fruits represented can be readily and perfectly reproduced in syrups, jellies, puddings, or other eatables and beverages. They are supplied in bottles packed in cardboard cases, and retailing at 4½d. Each packet with a pound of sugar yields from a pint to a pint and a half of a fine syrup, which in point of flavour leaves nothing to be desired.

*The GROCER says—*

DE CARLE'S SOLID FRUIT JUICES are seasonable goods, suitable for a grocer's trade. The juices, which are prepared in a powdered state, are useful for the easy production of fruit syrups, jellies, &c., and may be employed for flavouring puddings and cakes. The low price and good quality of these specialities are sure to make them sell well amongst all classes.

**3RD.—BUY.**

*Latest unsolicited Testimony from Messrs. J. C. Nicholls & Co., General Warehousemen, Sherston, June 20th, 1890.*

GENTLEMEN,—We have tried 6 doz. of your Solid Fruit Juices, and where introduced they give satisfaction, in fact, the best and cheapest drink we have ever sold. Please to quote lowest price and best terms for gross lots.

WRITE FOR SAMPLE AND TERMS TO THE SOLE MANUFACTURERS,

**DE CARLE & SON, Manufacturing Chemists, NORWICH.**

Agents—Foggitt, Thirsk, Evans, Sudd & Co., Exeter, and most London Houses.

**TIDMAN & SON**

Beg to announce that, having completed the arrangements of their newly-built premises at

**19 & 21 WILSON STREET, LONDON, E.C.,**

They are prepared to execute orders for Tidman's Sea Salt and Druggists' Sundries as per their price-list with increased precision and dispatch.

From June 1, 1890, orders for Sea Salt and Sundries as per TIDMAN & SON'S price-list amounting to not less than £5 net will be forwarded carriage paid to any place in Great Britain or any port in Ireland in direct steam communication with London.

PRICE LISTS ON APPLICATION.

Warehouses and Showrooms—19 and 21 WILSON STREET, LONDON, E.C.

**PASCALL'S GOLDEN MALTEX**

PATENTED.

Contains 25% of Allen & Hanburys' Extract of Malt.

**A NOVEL CONFECTION. MOST SALEABLE.**

*Delicious Flavour. Brilliant & Attractive Appearance.*

**SELLS AT SIGHT.**

*Vide Dr. Tanner's Report, and The Chemist and Druggist, April 20th.*

1/ Bottles, 9/ per doz.; 1-lb. Bottles, 20/ per doz.; and in 4-lb. Jars, 1/6 per lb

HANDBILLS POST FREE ON APPLICATION.

OF ALL WHOLESALE HOUSES, OR OF THE MANUFACTURER,

**JAS. PASCALL, BLACKFRIARS ROAD, LONDON, S.E.**



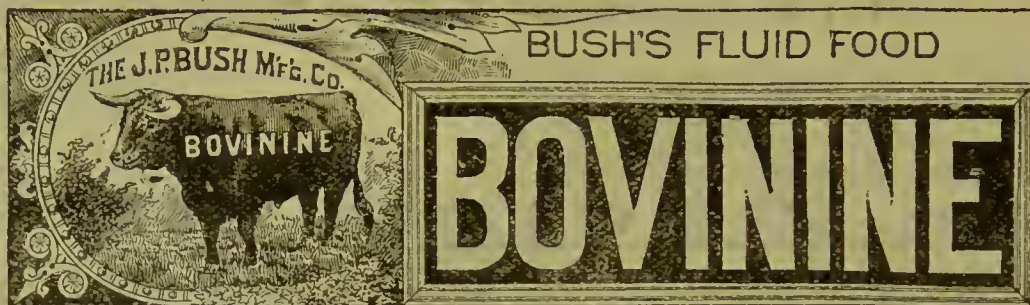
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(Introduced to the Medical Profession in 1878.)

AN IDEAL FOOD.

PALATABLE.

KEEPS  
PERFECTLY.



BUSH'S FLUID FOOD

CONTAINING  
20 PER CENT.  
OF  
COAGULABLE  
ALBUMEN.

THE VITAL PRINCIPLES OF BEEF CONCENTRATED.

**BOVININE** consists of the juices of lean raw beef obtained by a mechanical process, neither heat nor acid being used in its preparation. The nutritious elements of lean raw beef are thus presented in a concentrated solution, no disintegration or destruction of the albumen having taken place. The proteids in solution amount to twenty per cent. of the weight of the preparation, and give to it the great dietetic value it possesses in all conditions where a concentrated and readily assimilable food is needed.

**BOVININE** is entirely distinct from the numberless meat preparations prepared with heat. It is a Food, pure and simple, **Highly Concentrated**, and the most **Nutritious** yet presented.

## TO CHEMISTS AND DRUGGISTS.

**BOVININE** has been prescribed and enthusiastically endorsed by thousands of Physicians and Surgeons in the United States and Canada for the past Twelve Years. We are systematically introducing **BOVININE** to the notice of the Medical Profession of Great Britain, and many are prescribing it daily. It is sold at prices within the reach of all.

TO BE HAD OF ALL WHOLESALE DRUGGISTS.

In Bottles, 12 oz. (4s. 6d. size), 38s. per dozen; 6 oz. (2s. 9d. size), 24s. per dozen.

## THE J. P. BUSH MANUFACTURING CO.

Laboratory at Chicago, Illinois. Principal Office, 2 Barclay Street, New York, U.S.A.

DEPOT FOR GREAT BRITAIN - 32 SNOW HILL, LONDON, E.C.

TRADE MARK.

## IMPORTANT NOTICE.



The following paragraph by Professor Dr. FURBRINGER, Head Physician of the *Städtisches Allgemeines Krankenhaus im Friedrichshain, Berlin*, appears in the printed report from the Directorate of the said Hospital:—

"Denaeyer's Peptone has at last been adopted as the new means of nutrition, after trials, which were made on a large scale with a quantity presented to this hospital, had proved the undeniable advantages of this Peptone over all other peptone preparations in use. Among these advantages, special mention should be made of the pleasant flavour—enjoyed by nearly all patients—and of its form, which is a beautiful clear, amber-yellow sterilised liquid, requiring no preparation before being used."

# DENAAYER'S

## LIQUID STERILISED PEPTONE OF MEAT.

Highly sterilised and concentrated, the only rational one, free from microbes, acknowledged the most efficacious means of restoring **STRENGTH, DIGESTION, and APPETITE.**

It suits the most fastidious stomach, and is pleasant to the taste.

## LIQUID STERILISED PEPTONATE OF IRON.

The most active and assimilable of all ferruginous preparations. Specially recommended in all cases where the stomach cannot bear iron in the ordinary forms.

OF ALL CHEMISTS AND WHOLESALE DEALERS.

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# CAFFYN'S LIQUOR CARNIS



MEAT JUICE OBTAINED

BY A COLD PROCESS.

"Unrivalled as a Food and Tonic for Infants and Invalids on account of its Life-sustaining and Flesh-forming properties."

Is Manufactured at our Works in Kent from some of the finest Cattle England produces.

Every Bullock we kill is first carefully examined, and the animal found to be free from tuberculosis and all other diseases.

We buy none but British-fed Cattle, and use only the Best Cuts for making our Liquor Carnis. The inferior parts of the Beast, together with the Fat, Sinew, &c., are sold for other purposes.



A most Nourishing Fluid, consisting of the Uncooked Juice of Meat, or Muscle Plasma, permanently Preserved by the addition of a definite quantity of a Carbo-hydrate, which at the same time materially increases its Nutritive value and renders it a Perfect Food for Infants and Invalids.

Pharmacists willing to distribute specimen bottles and literature to medical men will oblige by intimating the same to us and sending List of Medicos.

Supplied by all Wholesale Houses  
at 20/- and 34/- per dozen.

TWO SHILLING BOTTLE.

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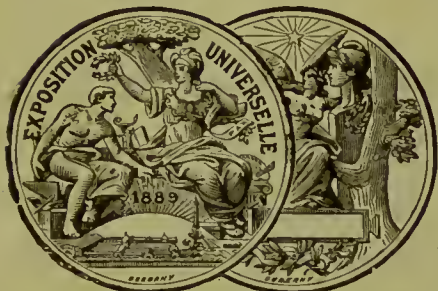
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## HIGHEST AWARD

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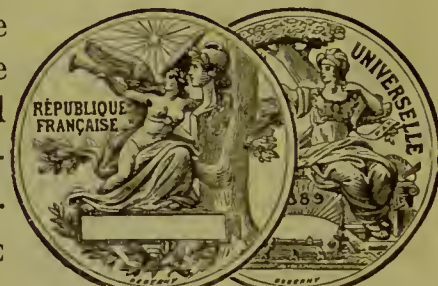
### PARIS EXHIBITION.



PRIZE MEDAL, PARIS, 1889.

To avoid imposition see that the trade marks (a Tower, with the word "Strength" across it, and "Tower Tea") are on every package, without which none is genuine.

WHERE VACANCIES EXIST AGENTS ARE APPOINTED BY



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**THE GREAT TOWER STREET TEA CO., LIMITED**  
5 JEWRY STREET, LONDON, E.C.



Sold by Chemists over 35 years.

Takes away all rank tastes from Butter, and prevents it turning RANCID in HOT WEATHER.

STOCKED BY WHOLESALE HOUSES  
Boxes, 3d., 6d., 1s., 2s. 6d., and 7s. 6d.

Mint Street Works,  
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## "MYRTLE GROVE" TOBACCO

In 1-oz., 2-oz., and 4-oz. Packets, and  $\frac{1}{2}$ ,  $\frac{1}{4}$ , 1 lb. Tins only.



**TADDY & CO., 45 Minories, LONDON**

ESTABLISHED 150 YEARS,

SNUFF, TOBACCO, AND SEGAR MANUFACTURERS.



Write for List of Specialties.



**COMPARE, AND THEN DECIDE.**

**5/6** per Gross.



BOTTLE SHAPE.

**PENNY MENTHOL CONES.**



BOTTLE SHAPE.

**5/6** per Gross.

On  $\frac{1}{4}$ -Gross Show Cards, with Elastic. Sample Free.

**PETER TYRER, 70 LONG LANE, BOROUGH, LONDON, S.E.**



## ROBINSON'S LIEBIG'S BEEF WINE.

Composed of Liebig's Extract of Beef, Extract of Malt, and sound Port Wine.

### REPORT ON BEEF WINES.

From the results of my Analyses of various Beef Wines I have had occasion to examine, none have equalled as regards strength, purity of ingredients, and (of no less importance) the skillful and judicious manner in which the respective ingredients have been proportioned and combined, the Liebig's Beef Wine manufactured by Mr. B. ROBINSON, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to Liebig's Extract of Meat, Extract of Malt, and sound Port Wine.

WILLIAM ELBORNE, F.C.S., F.L.S.

Lecturer on Materia Medica in the Owens College, Manchester (Victoria University).  
December 15, 1888.

## ROBINSON'S ORANGE WINE.

Specially prepared for Quinine Wine, does not deposit, will keep good in any climate, and well adapted for Export Trade. Supplied in Casks containing 9, 18, 30, 60, or 120 Gallons. Terms on application. [2]

## PHARMACEUTICAL SHERRY WINE.

This Wine is well adapted for Pharmaceutical Preparations, and is the strength ordered by the B.P. Price, in 6-Gallon Casks, 5/8 per gallon; in 2-Gallon Jars, 6/- per gallon, carriage paid. Casks charged 7/8, Jars 2/8, and allowed if returned. Cash or satisfactory reference to accompany order.

**B. ROBINSON, Distiller and Brewer of British Wines, Church St., Pendleton, Manchester.**

## "RAMORNIE." LIEBIG'S Extract of Meat.

As supplied to the Admiralty, War, and India Offices.

1-lb. Jars.....	per lb.	6/9	.....	per doz.	81/0	2-oz. Jars.....	per lb.	7/8	.....	per doz.	11/6
$\frac{1}{2}$ -lb. Jars.....	"	7/0	.....	"	42/0	1-oz. Jars.....	"	8/4	.....	"	6/3
$\frac{1}{4}$ -lb. Jars.....	"	7/3	.....	"	21/9	$\frac{1}{2}$ -oz. Jars.....	"	8/8	.....	"	3/3

QUOTATIONS FOR EXTRACT IN "BULK" ON APPLICATION.

Write for Detailed Price List to the Australian Meat Co., 9 and 11 Fenchurch Avenue, E.C.

8 lbs. Carriage Free



# SANDAL WOOD OIL

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SANDAL WOOD OIL is now recognised as one of the most successful specifics in Gonorrhœa, but still some medical men of repute have stated they have not succeeded with it. Can it be wondered at when such rubbish is offered for sale under the name of

Sandal Wood Oil?

Qualities of this article are being quoted at prices lower than the cost of the oil existing in the most inferior woods before drawing. How patients are to be pitied who are forced to consume such medicines!!!

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The only way to obtain pure Essential Oils is to buy direct from the Manufacturers,

**W. J. BUSH & CO.**

Drawers of all kinds of Essential Oils,

**ARTILLERY LANE, LONDON.**

WORKS:—*Ash Grove, Hackney; Mitcham, Surrey; Grasse, France; Messina, Sicily.*

*See the opinions of the highest Medical Authorities on "Bush's" Oil Sandal Wood.*



Telegraphic Address—CHEMICUS LONDON.

ADVERTISEMENTS APPEARING IN THIS ISSUE OF "THE CHEMIST AND DRUGGIST."

[illegible]

<b>APERT &amp; MINERALS</b>	<b>AGENCIES ABROAD</b>	<b>BAKING POWDER</b>	<b>BOXES</b>	<b>CAPSULES</b> (METALLIC)
<p>Apollinaris Co. Barnett and Foster Chemists' Agerated Waters Association. Mills &amp; Son (Kntin) Franz, Joseph, Co. Eneall and Co. (Utrix Acid Phospho) Hay, W. Idria and Co. Jewsbury and Brown Mills and Co. (Bourne) Schacht, W., and Co. Taylor, T. and F. J. [See INDEX ALL.]</p>	<p>Acard, Ed. Australasian Drug Co. Bolesky Cooking and Co. (Japan) Felton, Grimwade and Co. (Melbourne) Fongers and Co. (New York) Kamphorms, Frosser &amp; Co. N.Z. Lennon, B. G., and Co. Levy, Jules Natal Drug Co. (Limited) Noris, Zahn and Co. Peake, Allen and Co. Prosser, Taylor and Co. Roh, E. O., Co. Robert, J. (Paris, &amp;c.) Roeke, Tompskist and Co. (Mel- bourne) Sharlund and Co. Soul, W. H., and Co.</p>	<p>Goodall, Backhouse &amp; Co. <b>BEESE WAX</b> Bowdlear, W. H., and Co. Lunberger Wax Bleaching Works</p>	<p>Austin and Co. (Cardboard) Aylton &amp; Saunders Chalmers, W. B. Owen, J., Jr Farmenter, I. W. &amp; Co. Lim- Robinson and Sons</p>	<p>Betts and Co. Brooks, Peel and Co. Mellin, O. (Machine) Sanders, H. G., and Son</p>
<b>DITTO PLANT</b>	<b>APPARATUS</b>	<b>BICARB. SODA</b>	<b>BOTTLES</b>	<b>CAPSULES</b>
<p>[See SYRUPS and ESSENCES.] Barnett and Foster Bratby and Hinchliffe (Ld.) Egrot Karyager and Co. Payre, T. Gueret Freres Lozé, A., &amp; Co. Tyler, Hayward, and Co.</p>	<p>Clarke, S. (Food Warmer and Ble Tray) Egrot French Nickel Manufacturing Co. Orms, J., &amp; Co. (Scientific) Parker, Son and Payment Sinclair, Tweedie and Co. (Gas Tebbutt, F. (Jet) Thompson, C. (Gns-Jet) Wedgwood &amp; Sons (Mortars)</p>	<p>Brunner, Mond and Co., Lim. Howards and Sons May and Baker</p>	<p>Aire and Cudlor Bottle Co. (Ld.) Barnett and Foster Barrett, R. H. Bratby and Hinchliffe (Ld.) B-emi's (Lim.) Gilbertson, H., and Sons Hearn, E. A., and Co. Issacs and Co. Kilner Bros. Merk, J., and Co. Poths, H., and Co. Sanders, H. G., and Son Shirley, A. W. Thompson, Walters, Hole and Co. (Lim.) Toogood, W. Youlton, E.</p>	<p>Denoual, J. (Medicinal) Duncan, Plockhart and Evans, Sons and Co. Fournier, Mon and Co. Hooper, B., and Co.</p>
<b>ACETIC ACID</b>	<b>BOOKS</b>	<b>BISMUTH, PREP.</b>	<b>BUTTER COLR, &amp;c.</b>	<b>CSCRA SAGRADA</b>
<p>Dunn and Co. Fuert Bros. Morris and Callard (Salts)</p>	<p>Clarke, S. (Food Warmer and Ble Tray) Egrot French Nickel Manufacturing Co. Orms, J., &amp; Co. (Scientific) Parker, Son and Payment Sinclair, Tweedie and Co. (Gas Tebbutt, F. (Jet) Thompson, C. (Gns-Jet) Wedgwood &amp; Sons (Mortars)</p>	<p>Hearon, Squire and Francis Hewlett and Sons Howards and Sons May and Baker Symes and Co. White, Alfred, and Sons</p>	<p>Clements, S. G., and Co. Johnsen and Jorgensen Oldfield, Pattinson and Co. Hearon, Squire, and Francis Tomlinson &amp; Hayward</p>	<p>Duncan, Plockhart and Evans, Sons and Co. Ferris and Co. Moss, J., and Co. Squire and Sons</p>
<b>ALLIALOIDS</b>	<b>BLOOD MIXTURE</b>	<b>BLOOD MIXTURE</b>	<b>CATALOGUE</b>	<b>CEMENT</b>
<p>Howards and Sons (Cinchona) Smith, T. and H., Co.</p>	<p>Lincoln and Midland Counties Drug Co.</p>	<p>Churchill, J. and A. Griffin, C., and Co. Hargreaves, Dr. Lewis, H. K. Muter, Dr.</p>	<p>May, Roberts and Co. Sanger and Son</p>	<p>Key Bros. (Lim.)</p>
<b>AMMONIA</b>	<b>BRUSHES</b>	<b>BOOKS</b>	<b>CAMPORH</b>	<b>CHALK PRECIP.</b>
<p>Howards and Sons (Cinchona) Smith, T. and H., Co.</p>	<p>Dul and Co. Fordnam, W. B., and Sons, Lim. Kent, G. B., and Sons Moosler, David and Sons</p>	<p>Churchill, J. and A. Griffin, C., and Co. Hargreaves, Dr. Lewis, H. K. Muter, Dr.</p>	<p>Fuerst Bros. Howards and Sons Kens and Ashwell (Homoeo- May and Baker (pathis</p>	<p>Dunn and Co. Levermore, Ang., and Co. White, A., and Sons</p>
<b>AMMONIA</b>	<b>BANDAGES</b>	<b>BRUSHES</b>	<b>CAMPORH</b>	<b>CHEST PROTECTRS</b>
<p>Howards and Sons (Cinchona) Smith, T. and H., Co.</p>	<p>Bailey, W. H., and Son Robinson and Sons Sashbury and Johnson</p>	<p>Dul and Co. Fordnam, W. B., and Sons, Lim. Kent, G. B., and Sons Moosler, David and Sons</p>	<p>Fuerst Bros. Howards and Sons Kens and Ashwell (Homoeo- May and Baker (pathis</p>	<p>Solport Bros. Thompson, Walters, Hole and Co. (Limited) Wood, Vincent</p>



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Government Sanitary Co.  
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Bush, W., Son and Co.  
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Ponlece, Freres  
Stern, G. and G. (Pumiline)  
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Ell, A. S., and Son  
Lofthouse and Saltmer  
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Southall Bros. and Barclay  
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Cymington and Co. (Coffee  
Essence)

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Betts and Co.  
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**COMP. MEDICINES**

Allen and Hanburys  
Blyton, Astley and Co.  
Burroughs, Wellcome and Co.  
Fuerst Bros.  
Hooper, B., and Co.  
Leo and Co.  
Wyleys and Co.

**CONFECTIONERY**

Blyton, Astley and Co.  
Gibson, K., and Sons  
Kerfoot, T.  
Pascall, J.  
Warrick Brothers

**CONCENT. LIQS.**

Evans, Sons and Co.  
Fletcher, Fletcher & Stevenson

**CORN CURS**

Seabury & Johnson (Plasters)  
Thompson, M. P.  
Young, H.

**COTTON WOOL**

Haynes, G., & Co. (Absorbent)  
Robinson and Sons (Absorbent)  
Sanger, J., and Sons  
Seabury and Johnson

**CRASH LINSEED**

Mumford, G. S.

**DENTIFRICES**

Fentiman & Co.  
Jewsbury and Brown  
Lakeman, J. J.  
Newbery and Sons  
Reeb, H.  
"Salvia"  
Sutton, O., and Co.  
Thompson and Capper  
Warrick Bros.  
Woods, W. (Aroca Nut)  
Wright, C., and Co.  
Ziemer, B. W., & Co.

**DININFECTANTS**

Government Sanitary Co.  
Hamilton and Co.  
National Chemical Co.  
Seabury and Johnson  
Sanitas Co.

**DISINTEGRATORS****DRUGGISTS' SUP.**

Ayrton and Saunders  
Bailly, M., and Co.  
Bareilly and Sons (Limited)  
Davy, Humphrey, & Co.  
Evans, Lescher and Webb  
Evans, Sons, and Co. (Savary)  
Gilbertson, H., and Sons  
Hill, A. S., and Son  
Hookin, Wilson and Co.  
Idris and Co.  
Kay Bros, Lim.  
Lynch and Co.  
Mark, J., and Co.  
Marriot, E., and Co.  
May, Roberts and Co.  
Quelch, H. O.  
Rai kin, W., and Sons  
Sanger and Sons  
Schutze and Co.  
Still, W. M., and Co.  
Thompson, Walters, Hole and Co. (Lim.)  
Toogood, W.  
Wood, Vincent

**DOG MEDICINES**

Spratts (Patent)

**EAU DE COLOGNE**

Farina, J. M.  
Martin, Marin (Nun)

**ELASTIC HOSIERY**

Wood, V.

**ELECTRIC APPAR.**

Darton, F., and Co.  
Gent and Co.  
Orme and Co.

**EMEROCATION**

Ellman, Sons and Co.

**ENAMEL**

Fordham, W. B., and Sons  
(Lim.)

**ENEMAS**

Ingram and Son  
Sanger and Son

**ENGRAVERS**

Barker, W., and Son  
Corsan, J. R. (Glass)

**ENVELOPES**

Maclellan and Co.

**ESSENCES**

Beckett, W.  
Boehm, F.  
Brady and Hinchliffe (Ld.)  
Burgoyne, Burdidge and Co.  
Bush, W. J., and Co.  
Cummock, J.  
De Carle and Son (Fruit)  
Fitzsimmons and Fearnley  
Goodall, Backhouse and Co.  
Hay, W. O.  
Idris and Co.  
May and Baker  
Miller, A., and Co.  
Oldfield, Pattinson and Co.  
Stevenson and Howell  
Tyrer, P. (Anchovies)  
Woolley, Sons and Co.

**ESSENTIAL OILS**

Bush, W. J., and Co.  
Bush, W., Son and Co.  
Cooking & Co. (Japan Pepper-  
mills)  
Cummock, J.  
Evans, Sons and Co.  
Fitzsimmons and Fearnley  
Hodgkinson, Treacher and  
Clarke  
May and Baker  
Stevenson and Howell  
Symes and Co.  
Tombari Freres  
Treat, R. O.  
Warrick Brothers  
Wright, Layman and Umney  
Vogt, G., and Co.

**ETHER**

Glandon, G.  
Duncan, Flockhart and Co.  
Howards and Son  
May and Baker  
Robbins, J., and Co.  
White, A., and Sons  
Woolley, Sons and Co.  
Wright, Layman and Umney

**EUCALYPTUS**

Downie B. I. P. Co.

**EXTRACTS, FLUID**

Allen and Hanburys  
Barber, G., and Co.  
Burgoyne, Burdidge and Co.  
Evans, Sons and Co.  
Fletcher, Fletcher & Stevenson  
Hearon, Squire and Francis  
Hooper, B., & Co.  
Moss and Co.  
Potter and Clarke  
Wright, Layman and Umney

**EXTRACT, MEAT**

Aylwin, W. E.  
Australian Meat Co.  
Bovril (Limited)  
Brand and Co.  
Bush, J. P. Manufacturing Co.  
Denaeyer's Peptone and Ex-  
tract of Meat Co (Lim.)  
Liebig Co.  
Liquor Carnis Co. (Lim.)

**FEEDING BOTTLES****FILTERING**

Donlton and Co.  
Fordham, W. B., & Sons, Lim  
Sifted Carbon Filter Co.

**FLY PAPERS**

Biddle  
Ford, Shipland and Co.  
Turnbridge and Wright  
Wilson, S.

**FOOD (Infants & Invalids')**

Allen and Hanburys  
Baelz, L., and Co.  
Brand and Co.  
Bragg, J. L. (Charcoal Biscuits)  
Bush, J. P. Manufacturing Co.  
Goodall, Backhouse and Co.  
Hearon, Squire and Francis  
Liebig Co.  
Liquor Carnis Co. (Lim.)  
Mottershead & Co. (Bonger's  
Nestle, H. Food)

**FORMULA**

Brooks, T.

**GELATINE**

Coignet and Co.

**GINGER ALE**

Hay, W. (Essence)  
Mills, B. M., and Co.

**GLUE**

Coignet and Co.  
Fordham, W. B., and Sons

**GLYCERINE**

Fink and Co.  
Fuerst Bros.  
Price's Candle Co.

**GRANULAR PREP.**

Curtis and Co.  
Hearon, Squire and Francis  
Hill, A. S., and Son  
Kerfoot, T.  
Wright, Layman and Umney

**GUM**

Coignet and Co.  
Fink & Co. (Arabic, &c.)  
Deutschmann & Woroneicki  
Hyde, Nash and Co.  
Levermore Aug., and Co.  
Prunk, Davis and Co.

**GUTTAPERCHA**

Duncan, Flockhart and Co.

**HAIR PREP.**

Chesebrough Mfg. Co.  
Edwards and Co.  
Truefitt, H. P. (Limited)

**HERB BEER BITS**

Newball and Mason  
Oldfield, Pattinson and Co.  
Potter and Clarke

**HERBALISTS**

Butler, McCulloch and Co.  
Newball and Mason  
Potter and Clarke

**HOMOEOPATHIC**

Keene and Ashwell  
Leath and Ross  
Thompson and Capper  
Watson and Watts

**HOP ALE ESSENCE**

Hay, W.

**HOSPITALS**

Bolingbroke House  
London Homoeopathic

**HYPOPHOSPHITES**

Duncan, Flockhart and Co.  
Dunn and Co.  
Fellows  
Fletcher, Fletcher and Co.  
Symes and Co.  
Tyspe and King

**INHALERS**

Anderson and Adams  
Evans Sons and Co.  
Godfrey and Cooke  
Hookin, Wilson and Co.  
Schutze, P., and Co.  
Still, W. M., and Co.  
Toogood, W.

**INSECTICIDES**

Sanford and Co.  
Shore, J. F.  
Steiner and Co.  
Thompson, Walters, Hole and  
Co. (Lim.)

**INK [See MARKING]**

Bewley and Draper  
Duncan, Flockhart and Co.

**KETCHUP**

Tyrer, P.

**LARD**

Ewen, J., and Sons

**LEECHES**

Fitch and Nottingham

**LINT**

Liverpool Lint Co.  
Newsome, C.  
Robinson and Sons  
Seabury and Johnson

**LIME JUICE**

Evans, Sons and Co.  
Idris and Co.

**LOZENGES**

Allen and Hanburys  
Blyton, Astley and Co.  
Gibson, K., and Sons (Maufr.)  
Hill and Son  
Kerfoot, T.  
Pascall, J.  
Ralmes and Co.  
Warrick Bros.

**MACHINERY**

Beyer Freres.  
Burroughs, Wellcome and Co.  
Carter, J. H.  
Colial, J. P.  
Holroyd, J., and Co. (Lim.)  
McFerran, J. A.  
Mellin, C. (Capsuling)  
Palnu and Co.  
Werner and Pfleiderer

**MAGNESIA**

Andreas, Oscar, and Co.  
Bush, W., Son and Co.  
Dinneford  
Henry, T. and W. (Calcined)  
Hill and Sons, A. S.  
Kerfoot, T. (Citrate)  
Murray, Sir James, and Son  
Quelch, H. O.  
Southwell, C., and Co. (Citrate)

**MALT EXTRACT, &c.**

Allen and Hanburys  
Baelz, L., and Co.  
Burroughs, Wellcome and Co.  
(Kieper's)  
Hearon, Squire and Francis  
Oppenheimer Bros. and Co.

**MARKING INKS**

Barber, G., and Co. (Orimson)  
Hickson, J.

**MEDICINE CHSTS**

Beattley, E., and Sons  
Day, Son and Hewitt (Veteri-  
nary)  
Day and Sons (Veterinary)

**MENTHOL**

Al Menthol Depot, A. W.  
Shirley, Proprietor  
Cooking and Co.  
Hookin, Wilson and Co.  
Tyrer, P.

**MERCURIALS**

Fuerst Brothers  
Howards and Sons  
May and Baker

**METHYLATED****SPIRITS**

Burrough, J.  
Harvey, J. W., and Co.  
Jones and Co.  
Phillips, G., and Co.

**METHYLENE**

Robbins, J., and Co.

**MICROSCOPES**

Darton, F., and Co.  
Perken, Son and Rayment

**MILK**

Nestle, H. (Condensed)

**MIXING****MACHINERY**

Carter, J. H.  
Gardner, W.  
Werner and Pfleiderer

**MORPHIA**

Macfarlan, J. F., and Co.  
Smith, T. and H.

**MUSK**

Chiris, Antoine

**OILS, PAINTS, &c.**

Anglo-American Oil Co. (Lim.)  
Colthurst and Harding  
Fox, W., and Sons  
Prunk, Davis and Co.

**ointment bases**

Burroughs, Wellcome and Co.  
Chesebrough (Vaseline)  
Grindley & Co. (Petroleum  
Jelly)

**OPHTHALMIC**

Pomies, Dr.  
"Opticura"

**OPTICIANS**

Darton, F., and Co.  
Perken, Son and Rayment  
Raphael and Co.

**OTTO OF ROSE**

Fuerst Bros.  
Treat, R. C.

**PAPAIN PINKLER**

Kuhn, B.

**PARALDEHYDE**

Zimmermann, A. and M.

**PATENT AGENTS**

Horn and Son

**PEPPERMINT OIL**

Cooking and Co.

**PEPSINE, &c.**

Burroughs, Wellcome and Co.  
Channing and Co.  
Fletcher, Fletcher & Stevenson  
Newbery F. & Sons (Inglvin)  
Warner and Co. (Inglvin)

**PEROX. OF HYD**

Bunn and Co.  
Robbins and Co.

**PETROLEUM**

Anglo-American Oil Co. (Lim.)  
Dee Oil Co. (Limited) (Jelly)  
Grindley & Co. (Jelly)  
Hewitt and Co. (Jelly)

**PATENT MEDONS**

Alofas Co.  
Armbrrecht, Nelson and Co.  
Atkinson and Barber (Infant  
Preserv)  
Barclay and Sons (Lim.)  
Beacham, T. (Pills)  
Braggi and Co.  
Crouch, F. B. (Wafers)  
Edwards and Son  
Evo's Fruit Salt  
Evans, Lescher and Webb  
Fennell's (Powders)  
Globe Chemical Co.  
Goodall, Backhouse and Co.  
Grosgrain, C.  
Holloway (Pills and Oint.)  
Hop Bitters Co. (Lim.)  
Indin Tea Plenteur's Com-  
bination

**INVIKORINE Manufacturing Co.**

John's Liver Pills  
Lalor (Phosphodyne, &c.)  
Lambough, J. R. (Lim.)  
Lincoln (Jars Mix.)  
May, Roberts and Co.  
Newbery and Sons  
Powell, A. E., and Co.  
Radam's Microe Killer Co.  
(Lim.)

**Roberts and Co. (Foreign)**

Sequah (Limited)  
Sutton, W., and Co.  
Thompson, Walters, Hole and  
Co. (Lim.)  
Vogeler, The O. A. Co.  
Wilson, A. (Bunter's Nerve)  
Wilson, J. (Anti-Stiff)

**PERFUMERY,****FANCY SOAPS**

Bayley and Co.  
Bondeau and O  
Boehm, F.  
Burroughs, Wellcome and Co.  
Chesebrough Manufacturing Co.  
Chiswick Soap Co.  
Cook, E., & Co.  
Oward and Co.  
Dee Oil Co. (Limited)  
Deutschmann and Woroneicki  
Durrant, Geo.  
Ewen (Soaps)  
Farina, J. M.  
Grand Hills  
Greenall, T. S., and Son  
Mann, C. A., and Co.  
Mouilla Liquid Soap Co. Lim.  
Newbery and Sons (Hardoes)  
Osborne, Bauer & Cheeseman  
Pears' Soap  
Price's Patent Candle Co.  
Roamarine Manufg. Co.  
Ronne & Co.  
Sainsbury, S. (Lav. Water)  
Shirley, A. W.  
Taylor, J. N.  
Thompson, Walters, Hole and  
Co. (Lim.)  
Treat, R. O.  
Truefitt, H. P. (Limited)  
Vogt, G., and Co.  
Warrick Brothers  
West, T. (Ocell's Mona)  
Woolley, Sons & Co. (Powder)

**PHOTOGRAPHIC**

Botwright and Grey  
Darton, F., and Co.  
Howards and Son (Chemicals)  
Marion and Co.  
Orme, J., and Co.  
Perken, Son and Rayment  
White, Alfred, and Son

**PINE PRODUCTS**

Burroughs, Wellcome and Co.  
Stern, G. and G.

**PILL MACHINES**

Niblett, G. W.  
Palau, N., and Co.  
Pindar, J. W.  
Toogood, W. (Coater)

**PORCELAINGOODS**

Toogood, (E.c. Pots, regist.)

**PHARM. PREPS.**

Allen and Hanburys  
Barron, Squire and Co.  
Billault  
Boehm, F.  
Brady and Martin  
Burgoyne, Burdidge & Co.  
Burroughs, Wellcome & Co.  
Channing and Co.  
Claudon, G.  
Dee Oil Co. (Limited)  
Deutschmann & Woroneicki  
Duncan, Flockhart and Co.  
Fellows  
Fischer, Fletcher and Co.  
Fournier, Bon and Cie  
Frunau, R.  
Giles Schacht & Co.  
Greiff, R. W., and Co.  
Hearon, Squire and Francis  
Hewitt and Son  
Hill, A. S., and Son  
Hooper, B., and Co.  
Howards and Sons  
Jeyes Sanitary Compounds Co.  
Keith & Co. (Conc. Alcolours)  
Lorenz, H.  
Marlindale, W.  
May and Baker  
Morson, T., and Son  
Rankin and Borian  
Riodes and Co.  
Roberts and Co.  
Southall Bros. and Barclay  
Sutton, W., and Co.  
Symes and Co.  
Thompson, H.  
White, Alfred, and Sons  
Willow, Francis and Fidler  
Woolley, Sons and Co.



**PHOSPHORUS**

Colnet and Co.

**PILLS (Coated, &c.)**

Anderston Apothecaries Hall  
Beecham, Thomas  
Blair's Gout Pills  
Eade's Gout Pills  
Evans, Sons and Co.  
Frere, L.  
Holloway's  
Hooper's  
Hearon, Squire, and Francis  
McKesson and Nocina  
Newbery and Sons  
Richards, J. M.  
Warner, W. K. & Co. (Coated)  
Wyleys and Co.

**PODOPHYLLIN, &c.**

Kelth, B., and Co  
Smith, T. and H., and Co.

**PLASTERS**

Evans, Sons and Co.  
Johnson and Johnson  
Mather, W.  
Quilliam, J., and Co.  
St. Dalmas, A. De  
Seabury and Johnson  
Thompson, M. F.  
Young, H.

**POLISHING**

Bradley & Bourdas (Albatum)  
Fordham, W. B., and Sons  
(Limited)  
Oakley, John, and Sons

**PRINTING**

Bowers Bros.  
Corsan, J. B. (Glass)  
Cyclostyle Co.  
Ford, Shapland and Co.  
Silverlock, H.  
Townsend, J.  
Zuccato and Woolf.

**PUMILINE**

Stern, G. and G.

**QUININE SALTS**

Andreas, Oscar, and Co.  
Boehringer, O. F., and Sohne  
Howards and Sons  
Kuhn, B.  
Rivers, Hicks (Penny Quinine)  
Zimmermann and Co.

**RENNET**

Clements, S. G., and Co.  
Duncan, Flockhart and Co  
Johnsen and Jørgensen  
Oldfield, Pattinson and Co.

**SACCHARIN**

Allen and Hanburys  
Burroughs, Wellcome and Co.

**SALICYLIC ACID**

Fuerst Bros. (Kolbe's)  
Morse, T. and Son  
Zimmerman, A. and M.

**SALT**

Stern, G. & G. (Pepsalla)  
Thompson, Walters, Hole and  
Co., Ltd. (Sea)  
Tidman and Son (Sea)

**SALICIN**

Macfarlan and Co.  
Smith, T. and H., and Co

**SALOL**

Kuhn, B.

**SAUCES, PICKLES**

Goodall, Backhouse and Co.  
Tyrer, P.

**SEALING WAX**

Stewart, G., and Co.

**SCHOOLS, &c.**

City School of Chemistry and  
Pharmacy (Lim.)  
Liverpool School of Pharmacy  
London Homeopathic and  
Medical School  
Manchester College  
Royal Veterinary College  
South London School of  
Pharmacy, Lim.  
The School of Pharmacy  
Westminster College

**SILTZOGENES**

Brathay and Hinchliffe, (Ld.)  
Durafort  
Evans, Sons and Co.  
Ferre, T.  
Gerant, E. and Co.  
Lynch and Co.  
May, Roberts and Co  
Thompson, Walters, Hole and  
Co. (Limited)

**SHEEP DIP**

Hamilton and Co.

**SHOP FITTERS**

Bowling and Govier  
Bygrave, J. and W.  
Evans, Sons and Co.  
Hawks and Son  
Howlett, S.  
Natali, E. (Show Cases)  
Pothe, H., and Co.  
Treble, G., and Co.  
Yates, W. S.

**SOAP**

Ayrton and Saunders  
Bayley and Co.  
Blondeau and Co. (Vinolia)  
Chiswick Soap Co.  
Cook, E., and Co.  
Ewen, J., and Sons  
Fordham, W. B., & Sons (Ld.)  
Lucas and Co.  
Pears' Soap  
Stern, G. and G.

**SPONGE**

Cresswell Bros.  
Marks, H., and Sons (Ld)  
Paterson, M., and Co.

**SPECTACLES**

Botwright and Grey  
Darton, F., and Co.  
Perken, Son and Rayment  
Raphaël and Co.

**SPIRIT**

Burrough, J. (Pure & Mthyl)  
Harvey, J. and W., and Co.  
Jones and Co. (Mthyl)  
Macnair, A., and Co.  
Phillips and Co.  
Smith, Stephen and Co.

**STAMPS (Rubber)**

Holmeson, J.  
Pollard, A. W.

**STARCH**

Crichtley (Gloss)

**STOPPERS**

Austin and Co. (Sprinklers)  
Barnett and Foster  
Sanders, H. G., and Son

**STOVES**

Clark, S., and Co. (Lim.)

**SUGAR**

Gibson, R., and Sons

**SURGICAL**

Ayrton and Saunders  
Bailey, W. H., and Son  
Barclay and Sons (Limited)  
Cocking, J. T.  
De Luca, G. V.  
Eschmann Bros. and Walsh  
Haywood, J. H.  
Ingram and Son  
Liverpool Patent Lint Co.  
Mestivier and Co.  
Robinson and Sons  
Schutze, F., and Co.  
Schoenfeld Frères  
Still, W. M., and Co.  
Thompson, Walters, Hole and  
Co. (Limited)  
Wood, Vincent

**SULFONAL**

Burroughs, Wellcome and Co.  
May and Baker

**SYPHONS**

Barnett and Foster  
Brathay and Hinchliffe (Ld.)  
Durafort  
Favarger and Co.  
Ferre, T.  
Gerant, E., and Co.  
Kilner Bros.

**SYRINGES**

De Luca, G. V.  
Schoenfeld Frères

**SYRUPS**

Fletcher, Fletcher (Liquors)  
Idris and Co.

**TEA**

French and Langdale  
Gt. Tower St. Tea Co.  
Santha Tea Co.  
Walker and Dalrymple

**THERMOMETERS**

Bailey, W. H., and Son  
Darton, F., and Co.  
Perken Son and Rayment

**TILL**

Gledhill, G. H.  
Stokes, G. K. & Co.

**TINS**

Noakes, B., and Co.

**TOBACCO, CIGARS****CIGARETTES**

Lynch and Co.  
Peacock, M. & E.  
Taddy and Co.

**TOILET**

Evans, Sons and Co.  
Fordham, W. B., and Sons  
(Lim.)  
Fowler, E.  
Layng, R. C.  
Morse and Co. (Ivorine)  
Mumford, G. S.  
Quisich, H. C.  
Simon, J.  
Truefitt, H. P. (Limited)  
Woolley, Sons and Co.

**TOOTH PASTE**

Jewsbury and Brown  
Sutton, O., and Co. (Block)  
Wilson, A. (Bunter's)  
Woods, M. (Arecas)

**TRADE MARKS**

Horn and Son

**TRUSSES**

Bailey, W. H., and Son  
Haywood, J. H.  
Mather and Co.  
Wood, V.

**TYPE-WRITING**

Pollard, A. W.

**URETHANE**

Howards and Sons

**VACCINATION**

Vaccine Association (Lymph)

**VALUERS AND****TRANSFER AGENTS**

Bardoe & Co.  
Brst, F. J.  
Crocker, G. B.  
Orridge and Co.

**VASELINE**

Cheesebrough Manufacturing Co.

**VERMIN KILLERS**

Sanford and Son  
Steiner and Co.

**VINOLIA**

(Superfatted Medical and Toilet)  
Blondeau and Co.

**VETERINARY**

Bigg, T.  
Braggi, P., and Co.  
Day and Sons  
Day, Son and Hewitt  
Evans, Lescher and Webb  
Elliman, Sons and Co.  
James, W. H. (Busters)  
Rookledge, J.  
Spratts (Dogs)  
Sutton, F., and Co.  
Walker, Troke and Co.  
Wyleys and Co.

**WHOLESALE AND****EXPORT DEPOSITS**

Allen and Hanburys  
Barron, Harveys and Co.  
Burgoyns, Burbridge and Co.  
Bush, W., Son and Co.  
Bush, W., and Co.  
Clay, Dod and Co.  
Coward, G. F., and Co.  
Davy, Humphrey, and Co.  
Evans, Sons and Co.  
Evans, Lescher and Webb  
Evans and Sons (Limited)  
Ferre and Co.  
Fox, W., and Sons  
Goodall, Backhouse and Co.  
Harker, Stagg and Morgan  
Hearon, Squire and Francis  
Hewlett and Son  
Hill, A. S., and Son  
Hodgkinson, Treacher  
Clarke  
Lofthouse and Saltmer  
Macfarlan, J. F., and Co.  
Oldfield, Pattison and Co.  
Potter & Clarke  
Symes and Co.  
Thompson and Oapper  
Thompson, Walters, Hole  
Co. (Limited)  
Walker, Troke and Co.  
Willows, Francis, and Butler  
Woolley, Jas., Sons and Co.  
Wright, Layman and Umney  
Wyleys and Co.

**WINES, SPIRITS**

Coleman and Co. (Meat and  
Durrant, G. (Orange) Malt.  
Goodall, Backhouse and Co.  
Idris & Co.  
Miller, A., and Co.  
Robinson, B.

# BERDOE'S TRIPLE FRENCH PERFUMES



THESE PERFUMES have been known to the trade for many years past, and their steadily increasing sale is the best proof of the appreciation in which they are held. Notwithstanding that the prices of some brands of perfumes have been reduced, F. NEWBERRY & SONS find it both impossible and needless to offer any other advantages to buyers than—(1) the excellent quality of the Perfumes themselves, (2) their price. The object kept in view is not to produce goods which may be sold at a given price and leave a given margin of profit, but to produce such as shall equal or surpass a given standard of quality.

## BERDOE'S TRIPLE

In PLAIN STOCK BOTTLES of 20 oz., 10 oz., and 5 oz. £ s. d.

Ess. Bouquet .. .. .			
Frangipane .. .. .			
Jasmin .. .. .			
Jockey Club .. .. .	per 20 oz.,	0 8 7	
Millefleurs .. .. .			
New Mown Hay .. .. .	per 10 oz.,	0 4 4	
Opoponax .. .. .			
Patchouli .. .. .			
Rondeletia .. .. .	per 5 oz.,	0 2 3	
Stephanotis .. .. .			
Ylang Ylang .. .. .			

The above are the leading Essences, and to these the special attention of customers is asked. Those who desire greater variety will find in "Newberry's Catalogue" a more extended list.

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Wood Violet .. .. .		
White Rose, 20 oz., 9s. 10d.; 10 oz., 5s. 1d.; 5 oz., 2s. 7d.		
Eau de Cologne .. .. .	per 20 oz.,	0 4 4
Lavender Water .. .. .	" 10 "	0 2 3
	" 5 "	0 1 2

Berdoe's Perfumes, in Handsome Show Bottles for the Counter, Rose Cut Stoppers, Vitrified Opal Shield Labels with Gold Border and Black Letters, from 11s. 6d. each.

Established A.D. 1746.

# F. NEWBERRY & SONS.



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PARIS EXHIBITION, 1889.

PRIZE MEDAL AWARDED TO



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(VASELINE).

Absolutely Genuine Paraffinum Molle of the very Purest Form, and we claim that it is superior to Vaseline.

Packed in Tins, 1, 4, 10, 14, 28, 56, and 112 lbs.

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(REGISTERED).

Universally adopted by the Medical Profession  
FOR

**OPHTHALMIA, SCURVY, RINGWORM,  
ECZEMA, SKIN DISEASES,**

FOR  
**EXTERNAL & INTERNAL IRRITATION  
OF EVERY KIND.**

PACKED IN CASES—

One Doz. 1s. 6d. Bottles; One Doz. 2s. 6d. Bottles  
or half of each.

TESTIMONIALS MAY BE HAD UPON APPLICATION.

# "EDIBLE SALVO PETROLIA"

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1s. 6d. per Tube.

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TRADE MARKS REGISTERED.

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The Latest Novelty is our  
**RUBBER  
COMPLEXION  
BRUSH.**

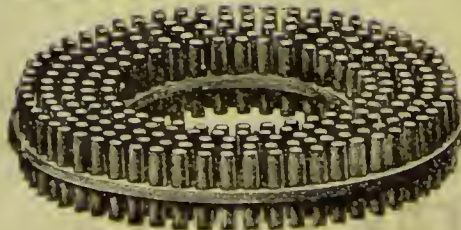
PACKED IN A NEAT BOX. Entirely does away with poisonous cosmetics and face-washes. Used in the ordinary daily ablutions, with a little soap, it makes the skin beautifully fresh, soft, and smooth, and effectually eradicates all blemishes, blotches, pimples, &c. Used as a shampoo brush, gentlemen will find it a most useful adjunct to the toilet, as it entirely removes scurf and dandruff. Mothers and nurses will find it invaluable for bathing the delicate skin of infants and children.

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Ring.**

Is perfectly tasteless, and so constructed that the flattened teeth serve to expand the skin of the gums, softening the latter, and aiding the coming tooth without irritation.

PRICES.—Bath Brushes, 4s. per dozen; Complexion Brushes, 2s. per dozen; Toilet Brushes, with handles, 6s. and 17s. per dozen; Tooth Brushes, 6s. and 6s. 6d. per dozen; Teething Rings, 3s. 6d. per dozen.

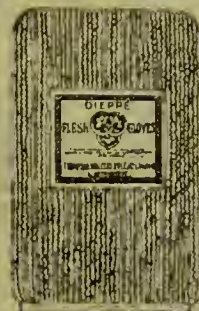
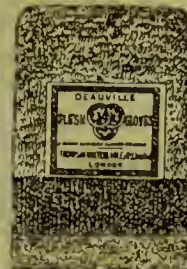
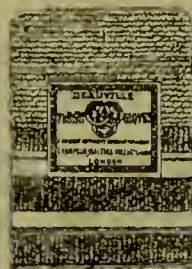
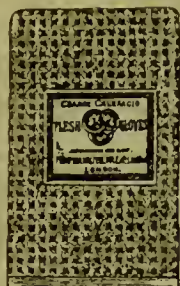
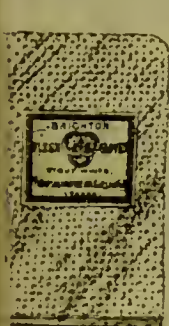
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Before placing your next Order please note the following Prices and Discounts.



Cat. No.		Gloves.
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714	" " " thin ... ..	4/6
715	" brown " ... ..	5/6
715A	" " " thin ... ..	1/6
716	CALEFACIO, coarse or fine ... ..	5/6
716A	" fancy stripe border... ..	2/3
717	DEAUVILLE, brown and white, striped ... ..	4/3
718	" brown striped ... ..	4/3
719	DIEPPE, granite colour ... ..	5/6
720	LOOFAHS AND TURKISH GLOVES, single gloves ... ..	3/6
721	SCARBOROUGH, dice pattern, brown and white ... ..	5/6
721A	" " fancy colours ... ..	3/9
722	SULTAN, white with red stripes ... ..	6/-
723	TURKISH, thin white, No. 1 ... ..	3/4
723A	" " No. 2 ... ..	2/-
724	" thick ... ..	4/9
725	" striped ... ..	3/8
726	UNION, one side hard brown, the other soft white ... ..	6/3
727	VICTORIA, brown, with red and white stripes ... ..	6/3
727A	FELL'S Hygienic ... ..	7/6

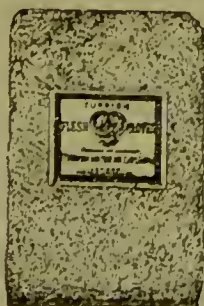
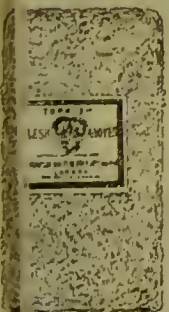
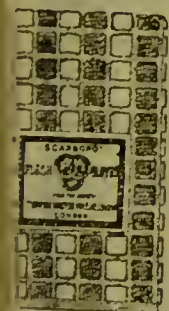
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**Real Roses**

18 Old Swan Lane,

**LONDON, E.C.**



**Real Violets**

\* **DELICIOUS + CACHOUS.** \*

3/- per lb., Splendidly Labelled.

4/- per dozen boxes, Gold Embossed on Calf.

**WHITE AND SOUND TEETH.**

**JEWSBURY & BROWN'S**

**ORIENTAL TOOTH PASTE.**



This old-established and increasingly favourite Dentifrice has been over Sixty Years before the Public. It is warranted to retain its properties and keep in good condition in any climate. The original and only genuine is manufactured solely by

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DENTIFRICE.**

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most efficacious

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**DENTIFRICE.**

It Preserves, Beautifies and renders the Teeth perfectly White without injuring the enamel. It Strengthens the Gums. It is most Agreeable as a Mouth-wash, and Sweetens the Breath. It is Invaluable to Smokers. Prices: 13 size, 9; 2 size, 15; 36 size, 24 per dozen.

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*Any Bottles can be had filled ready with Sponge and Ammonia or Everfresh Salts.*

#### SPECIAL CHEAP LINES FOR QUICK SALE.

No.	Description.	Filled with Sponge, Ammonia, or Everfresh Salts.
168 9.—Cut Watches ... ..		4/- doz., 45/- gross.
242.—Moulded „ star pattern ...		3/3 „ 33/- „
246.—Heart shape „ „ „		4/- „ 45/- „
238.—Watch with anchor in mould of bottle „ „ „		3/9 „ 42/- „
256.—Moulded, with cross „ „ „		4/- „ 45/- „

#### SPECIAL LINE.

No. 227.—Watch with hand-painted cameos let in face of bottle, 4/- doz., 45/- gross.

No. 1.—Nickel-capped Watch, filled with Sponge and Ammonia, 2/- doz., 20/- gross.


No. 186.—China bottle, fitted with china stopper; a splendid selling article; 36/- gross, filled with Everfresh Salts; 25/- gross empty.

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20/- lots and upwards of Cut-glass Bottles sent on approval, if buyer is willing to pay cost of carriage of any he may return.

#### CERTAIN SATISFACTION GIVEN,

As only saleable lines are sent.

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No. 32.—A splendid 2/6 Spray, with double ball (black)...	22/- doz.
No. 28.—A pretty line, coloured glass and flowers, single ball ...	15/- „
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*A dozen assorted sent on approval.*

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# A N APOLOGY.

## FRESH SUPPLIES.

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# HENRI FRÈRES' SOAP

But, owing to an advertisement inserted in "The Chemist and Druggist," the orders came in so rapidly that Ayrton & Saunders' stock was soon exhausted, and Messrs. Henri Frères absolutely refuse to send out their Soap till it is perfectly *matured*, in order that its reputation may be sustained. Consequently great disappointment has been caused. Ayrton & Saunders have now, however, received a large consignment and are prepared to despatch orders promptly. The leading varieties are :—

							Per Dozen.
<u>Carbolic Acid and Glycerine</u>	in 3 dozen Boxes	...	...	...	...	...	2/3
<u>Pine Tar</u>	... in 3	„	...	...	...	...	2/3
<u>Sulphur Cream</u>	... in 3	„	...	...	...	...	2/3
<u>Cold Cream and Honey</u>	... in 1	„	...	...	...	...	3/6
<u>Glycerine and Cucumber</u>	... in 1	„	...	...	...	...	3/6
<u>Oatmeal</u>	... in 1	„	...	...	...	...	3/6
<u>Transparent Glycerine</u>	... in 1	„	...	...	...	...	4/6

Any Chemist who has not yet gone in for this brand of Soap will do well to place a Sample Order, as "*repeats*" are being received by every post. The quality is excellent, the margin good, and when displayed on the Counter it simply Sells Itself.

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# The Best is Best.

LONDON]

JULY 16TH.

[1890.

## Reports upon The Best Extract of Malt.

### THE LANCET.

The *Lancet*, after due inquiry and investigation, reported upon the Kepler Extract of Malt as follows:—"It is the best known and, in this country, the largest used Extract of Malt. It is as distinct an advance in therapeutics as was the introduction of cod-liver oil. It is one of our best nutritive and digestive agents for chronic dyspepsia, and is undoubtedly useful in consumption and other wasting diseases."

In the above dictum we find the gist of the whole matter in a nut-shell, and very naturally it may be asked—what is this Extract which the *Lancet* pronounces the best known and largest used? What is this product that is as distinct a step forward as the discovery of Cod-liver Oil? What is the nature of this nutritive and digestive agent, undoubtedly useful in wasting diseases? The answer is simply—it is an improved, refined, condensed, highly nutritious and easily assimilable food that has been used for untold ages. It is an advance upon the "ptisan" of antiquity, quite as great and substantial as the improvement "Tabloids" is upon primeval modes of medication. It is an Extract of the choicest Barley Malt, which has been made by straining an infusion of the best malted barley, evaporating the liquid *in vacuo* and condensing it by very special and improved methods. So great a food is barley that some have endowed it with the dignity of medicinal properties. Well may the *Lancet* pronounce it "as distinct an advance in therapeutics as was the introduction of Cod-liver Oil." The great Liebig considered malted barley the greatest discovery in the matter of infant feeding.

### THE LONDON MEDICAL RECORD.

The *London Medical Record* says:—"The Kepler Extract is the best, richest in diastase, and the most largely used. We have witnessed the processes, have tested it, and are satisfied that it is not only unsurpassed, but unequalled. It is the Extract of Malt which every physician now prescribes."

It will be observed that in this quotation the verdict is the same as in that from the *Lancet*, viz., that "Kepler's is the best." But it is further pointed out that it is the richest in diastase. Now, of all the grains barley is pre-eminently the one rich in diastase ferments. Before this one grain, diastatically, all other grains are merely chaff, and in making a combination of them the barley's diastase is ordinarily relied on to do the work. As is well known,

the action of malt diastase is the same as that of the saliva and of the pancreatic juice, viz., to convert starch into sugar. When the food is bolted, the saliva has no time for action, indigestion ensues, and it is in such cases that the Kepler Extract has been found useful, for "it is not only unsurpassed, but unequalled."

The *London Medical Recorder* confirms the quotation already transcribed, as follows:—"The Kepler Extract of Malt speedily improves the power of assimilation, and in cases of consumption, scrofula, and many of the wasting diseases of children, a wonderful improvement in the patient's condition may be noticed after a fortnight's treatment." We have here a typical example of how physician after physician has reported upon this product. No more trying chronic ailments are daily encountered than consumption, scrofula, and the wasting diseases of children. When cod-liver oil has failed, and the food is disagreeing, and medication proves worse than useless, the Kepler Extract affords a recourse sure and steadfast—one which gives promise of an improved condition after a fortnight's treatment. It improves the digestion, and upon this follows improved assimilation and nutrition, both of which give rise to a better appetite: this in turn again carries the improvement onward.

### MEDICAL TIMES AND GAZETTE.

The *Medical Times and Gazette* reports as follows:—"The Kepler Extract of Malt is deserving of special commendation. It is, we venture to say, by far the best we have seen, the one most widely known and most largely used. By their new process, which includes evaporation at an unusually low temperature, all of the diastase is fully preserved, and the Kepler Extract of Malt will be found unequalled in its power of digesting starchy or farinaceous foods." Why is the Kepler Extract of Malt deserving of special commendation? First of all, because it is made from the choicest barley only. Second, because barley contains more choice ingredients obtainable by malting than any other grain. Third, because no grain malts like barley. Fourth, because the Kepler Extract is prepared at every stage by the most improved and scientific processes. Fifth, because nothing is wasted, and all the digestive, nutritive, and alterative principles of the grain are secured. Sixth, because nothing insoluble and indigestible is retained. Seventh, because in taste it is as delicious as honey. Eighth, because in the system none of it is lost, and it is all easily absorbed.

The Kepler Solution and Kepler Malt Extract supplied to the Trade in bottles, containing  $\frac{3}{4}$  lb. and  $1\frac{1}{2}$  lb., at 22s. and 38s. per doz. Retail prices, 2s. 6d. and 4s. Supplied by all Wholesale Houses throughout the World.

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On account of its sticky nature, "Lanoline" was objected to by some physicians, but this objection has now been overcome by the introduction of a "Lanoline" Ointment base—Unguentum Lanolini—which is applicable wherever, formerly, lard or any other old ointment bases have been used. Its advantages may be summed up as follows:—

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2. It is grateful to the tenderest skin.
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4. It is aseptic; no bacteria or microbes can live in it, or pass through a thin layer when spread over a fresh wound.

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Detergens, acting for four hours, arrested future growth."

Of all Druggists, Wholesale and Retail, throughout Great Britain, Ireland, and Colonies.

From the *Lancet*, Dec. 22, 1886:—"In our hands it has been a most effective agent in skin diseases, especially of the chronic eczematous class, and one class of psoriasis which had resisted all other kinds of treatment speedily got well under the application of the *Liquor Carbonis Detergens*. We esteem it a very valuable addition to our list of skin remedies."

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From the *British Medical Journal*, Sept. 22

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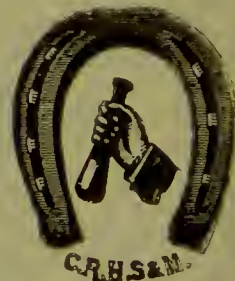
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SUBSCRIBERS are requested to make room for a big number of THE CHEMIST AND DRUGGIST next week.

### OVER TEN TONS

of paper will be used in the production of that issue, which will be our Summer Number for 1890, and it will be unusually attractive in appearance, valuable in contents, and the most conducive to

### TRADE INTERESTS

of any issue yet printed. The advertisements will comprise a mass of material from which information of the greatest utility can be gathered. If there are any manufacturers or dealers who, through holiday-making, pressure of business, or from other causes, have neglected so far to send in their announcements, we may inform them that if they write to the publisher at once,

### THERE IS JUST TIME,

But we cannot take copy for this issue after Wednesday of next week.

### ADVERTISEMENTS OF SITUATIONS,

Businesses for disposal, &c., must be sent in next week to reach us not later than Thursday, by 5 P.M., so as to enable us to get the whole journal printed, folded, stitched, wrapped, and delivered at the usual time.

## General News.

**THE IRISH PHARMACY BILL.**—The second reading in the House of Lords of the Pharmacy Act (Ireland 1875) Amendment Bill, which was set down for Thursday in this week, has been postponed, and is now fixed for Monday next. Lord Macnaghten will probably be in charge of the Bill, and the Earl of Meath may oppose it on behalf of the Pharmaceutical Society of Ireland.

**THE WHEELDON DEFENCE FUND.**—The trustees of the Wheeldon Defence Fund (Messrs. Michael E. Foster and T. Howell Williams) have now issued a statement of their accounts as follows:—Gross amount subscribed, 101*l.* 14*s.* 6*d.*; costs on both sides, with postage, &c., 76*l.* 5*s.* 11*d.*; leaving in hand 25*l.* 8*s.* 7*d.* They are refunding to each subscriber the proportionate amount of his contribution.

**ADDITION TO THE PHARMACEUTICAL PRESS.**—A new pharmaceutical journal, to be known as "Le Potard, Organe des intérêts des élèves en Pharmacie," has been started at Philippeville, in the French colony of Algeria, of all places in the world. The paper is a monthly, and the subscription price is a modest half-crown a year. We wonder how long the "Potard" will continue to flourish in the meagre pharmaceutical soil of Philippeville.

**THE SALE OF POISONS.**—Mr. Alfred William Morgan, chemist, of Railway Street, Chatham, sold a pennyworth of aquafortis to a young man—a stranger—on June 24, who said he wanted it for umbrella work. The youth drank nearly half of it, and after spending a fortnight in the hospital, was moved on to the police-court, and is now committed to the assizes.—A case of attempted poisoning with oxalic acid is reported from Bristol. Mr. Evans, chemist, Victoria Street, supplied the poison.

**SPONTANEOUS COMBUSTION.**—A fresh instance of so-called spontaneous combustion is reported from Irvine (Scotland), where a waggon of limestone after being exposed to the rain over-night went on fire, and was entirely consumed. The theory is that the heat generated by the slaking of the lime was intense enough to ignite the woodwork.

**FATALITY AT CHLORATE OF POTASH WORKS.**—As Matthew Smith, one of the employes in the chlorate of potash department of Messrs. Muspratt's works at Flint, was entering the premises, he struck a light against his trousers. He was immediately enveloped in a mass of flame. A man promptly threw Smith into a pool of water, but when extricated it was found that he had been so fearfully burnt that no hopes are entertained of saving his life. Smith's wearing apparel was so impregnated with chlorate dust that it ignited immediately.

**SCIENTIFIC EXPLORATION OF ARABIA.**—More than three years ago the Sultan dispatched Ibrahim Bey, an officer of high rank in his army, with a scientific mission to Palestine, and thence through the Arabian Peninsula, Yemen, and to Bagdad, for the purpose of studying the materia medica and medicine of the wandering tribes of Syria and Arabia. We now gather from the *Revue Medico-Pharmaceutique*, of Constantinople, that the commission has returned with a large amount of valuable specimens and a rich store of information, which, it is hoped, will shortly be published.

**CRICKET.**—The Birmingham Chemists' cricketers had a turn with the Small Heath Langley Club on Wednesday. The weather was favourable for scoring, so much so that there was not time to play the game out. S. H. L. went in first and reached 190, Mr. Hill contributing 65. The Chemists' Association club, with the aid of 52 from Mr. Fallows reached 87 for 6 wickets.—The Dundee chemists played the "Mercantile" (grocers chiefly) on Wednesday. The chemists only totalled 27 in their first innings, against which their rivals recorded 57. The chemists then pulled themselves together, and scored 60 for nine wickets, thus saving their reputation.—Having secured their weekly half-holiday, some of the Sheffield chemists and their assistants have formed a cricket club, and have made the president of the Pharmaceutical and Chemical Society (Mr. A. R. Fox) their president. They played their first match last week with the Whittle Club, making a draw.



**ILLEGITIMATE MEDICAL PRACTICE ON THE WEST COAST OF AFRICA.**—This is how the Acting Colonial Surgeon of the Victoria Hospital, in Gambia, describes the medical treatment which is prevalent among the natives. There is, he says, but one recognised treatment for disease. This consists in calling in a man who is supposed to be a "doctor," and who, after looking at the patient, sits down at his bedside, and writes in Arabic characters on a wooden slate a long rigmorale, generally extracts from the Koran. The slate is then washed, and the dirty infusion drunk by the patient. As a result of the popular ignorance and superstition, unqualified practice of every description is, we are told, openly carried on, and drugs and poisons are daily sold by persons who are wholly ignorant of their properties and doses.

**CURIOSITIES OF POISONING IN BOMBAY.**—From the report of the Government analyst of Bombay for the past year it appears that his department was concerned in the investigation of 170 cases of suspected human poisoning last year, in 66 of which the poison was actually discovered. In 33 of these the poison used was arsenic, in 20 opium, in 5 pounded glass, in 3 *dhatūra*, in 3 mercury, and in 2 *nuxvomica*. In one instance sweetmeat balls containing arsenic were found in the possession of a woman who had given directions that they were to be sent to certain persons with whom she was at enmity; and, in another, nine persons ate bread containing a large quantity of arsenious oxide. In one case a man mixed poison with his food, and accused another of trying to poison him. A woman confessed to having pounded her glass bangles and mixed the powder with her husband's bread. Glass seems to be used for this purpose only when poisons are not within reach, and the attempts usually fail on account of the grittiness of the glass exciting suspicion. Arsenic, being easily obtainable, is the chief resource of the Indian poisoner, and is usually administered in sweetmeats. Opium comes next.

**ANNUAL EXCURSION OF BRIGHTON CHEMISTS.**—The members of the local association of pharmacy enjoyed an excursion to Arundel on Wednesday, on the invitation of Mr. Alderman W. H. Cox, J.P. The weather was beautiful, and there was a good muster at 10.15 at the Brighton station. The Mayor was among the company. At Ford Junction the party boarded Mr. Alderman Cox's yacht *Sissie*, and steamed up the Arun to Arundel, and thence to Amberley. After visiting spots of interest, the party steamed back to Arundel Park, where an excellent repast, brought by the yacht, was enjoyed. After luncheon, the Mayor proposed the health of Mr. Alderman Cox, and on behalf of those present thanked him very cordially for his kindness and thoughtfulness in providing such a very enjoyable trip. This was the fourth time that he had invited the party, and he (the Mayor) was sure that no one enjoyed the excursion more thoroughly than did the alderman himself. There were several other speeches, and the next move was to the Bridge Hotel, where tea was partaken of. The evening being fine, the yacht was taken, *via* Littlehampton, to Southwick, where the train for Brighton was caught, home being reached about 11 P.M.

**THE LATE MR. WILLIAM KITCHEN PARKER, F.R.S.**, who died suddenly on the 3rd inst., formerly Hunterian Professor of Comparative Anatomy at the Royal College of Surgeons, was, in his early years, an assistant to a chemist and druggist at Stamford. He was the son of a South Lincolnshire farmer, and on the farm, without any instruction, had acquired an extraordinary acquaintance with the anatomy of the animals with which he was familiar, and had made many skeletons. While at the chemist's, engaged at business from 7 A.M. to 10 P.M., he rose several hours before his morning's work began, and with a fellow-apprentice scoured the neighbourhood for botanical specimens. Thus, in two summers, he formed and preserved a collection of 500 species of plants. After a few years he came up to London as a surgeon's assistant, and, still continuing to make progress in anatomy, he became assistant to Professor Todd at King's College, and qualified for medical practice in 1849. His microscopical and anatomical work was of the utmost value, and the memoirs he published were illustrated by many hundred plates from his own careful drawings, and published by the Royal, Zoological, and Linnean Societies. Unfortunately they are a sealed book to all but skilled anatomists, for, not-

withstanding brilliant flashes and quaint conceits and illustrations, Mr. Parker's style of exposition by no means did justice to the value of his matter. He was an enthusiast in his work, but his work was mostly unremunerative. Besides his professorship he had a grant from the Royal Society, and subsequently a pension from the Civil List. He died at the house of his second son, Professor W. Newton Parker, of the South Wales University College, Cardiff, at the age of 67.

**A NEW WHITE-LEAD PROCESS**, which it is claimed will obviate some of the objectionable characteristics of the method now followed, such as expensiveness, tediousness, and serious danger to health, has been devised by Professor MacIvor, F.I.C., and has been in operation for the past nine months at experimental works, 47 Clapham Road, London. In this process, litharge is first made from lead ore and then thoroughly purified by washing. It is then put in a vat, which is fitted with stirring apparatus, and a solution of acetate of ammonia is run into the vat upon the litharge. The mixture is then agitated for six hours, so that the lead is fully absorbed into the solution, and it is allowed to settle. The supernatant liquor containing the lead is then pumped into a second vat, in which it is submitted to the action of carbonic-acid gas. By this means the lead is precipitated and the acetate of ammonia recovered for use over again. If the litharge is very pure, the carbonic-acid gas is introduced into the first vat, with the result that the white lead is produced direct and the acetate of ammonia separated at the same time for re-use as before. In either case, after the white lead has been precipitated, the mother-liquor is drawn off, and the unwashed white lead is passed through filter-presses to extract from it all the mother-liquor. The pressed lead is then put in a washer and agitated by stirrers in cold water. After eight of these agitated washings, the white lead is again passed through the filter-presses, and through a hydraulic press, whence it is removed to the drying-room, and, when dry, is ready for use. The result is a pure white lead, free from crystals, and produced in a few hours, as against months by the ordinary method, the cost of production being also much less. The process and the products have been examined by several leading chemists, who include Professors Crookes and Watson Smith, and Dr. Dupré. All the operations in the manufacture of lead under this process are done in the wet, so that there is no dust, and therefore no danger to health from that source.

**SOCIETY OF CHEMICAL INDUSTRY.—ANNUAL DINNER.**—On Thursday evening, July 10, the annual dinner of the Society was held at the Exchange Hall, Nottingham. Sir Lowthian Bell, Bart., presided, and the Mayor of Nottingham was present. The company numbered about 200. In his speech, submitting the toast of "The Town and Industry of Nottingham," Sir Lowthian Bell said, if the industries were to be judged by what the town deserved for the progress made during the last twenty-five years, he knew of no amount of prosperity that could be better deserved than by the town of Nottingham. He was, however, sorry to hear from quarters he could not possibly misunderstand that one of their great staple trades was not altogether in the commercial position which they and the country at large would like to see it enjoy. He was very far from thinking these occasional depressions in any branch of industry were an unmixed evil, and looking back a few years, one was really astonished at the progress any particular branch of business had made in that time. Referring to the iron trade, he remembered the time, when they could only make a ton of iron with four tons of coal, and made but sixty tons of iron in the week; now, they could make a ton of iron with half the amount of coal, and thought themselves badly used by their furnaces if they did not make more than seventy tons a day. He referred with pleasure to his visit, and asked the company to join him in drinking prosperity to the industries of Nottingham. Mr. R. Fitzhugh, representing the Nottingham and Notts Chemists' Association, was one of those who replied to the toast of "Our Guests," proposed by Alderman Sir John Turney. It was their utmost endeavour in the Nottingham Association to do everything for the educational advantage of the town, and particularly in the department that concerned chemical science. Mr. T. Tyrer (London), proposing "Success to the Nottingham Section," referred to the excellent arrangements which had attended the gathering at Nottingham.



## IRELAND.

**CARBOLIC DISINFECTING TABLETS** are the latest penny novelties at Cork.

A **WINDOW-DRESSER** and front-shop decorator is offering his services to Dublin chemists at 5s. per diem.

**NEW DISPENSARIES** are to be erected at Shankhill Road and North Queen Street, Belfast, at a cost of 2,200*l*.

**FIRE.**—The medical and pharmaceutical concern of Messrs. Grattan & Co., Belfast, was on Sunday night damaged by fire, the origin of which is unknown.

**SURGEON PARKE**, the African explorer, has presented to the Science and Art Museum, Dublin, seven poisoned arrows used by the cannibal pigmies of "Fort Bodo."

**DRUG CONTRACTS.**—Tenders for a year's supply of drugs and medicines are invited by the governors of the Westmoreland Hospital Dublin, and by the Guardians of Longford Union (July 23).

**SUDDEN DEATH OF AN APOTHECARY.**—On Saturday evening last Dr. David H. Hadden, L.A.H., Dublin, about 45 years of age, died very suddenly at Harcourt Street Terminus, after running to catch the train. Heart-disease was the cause of death.

**PHARMACEUTICAL SOCIETY OF IRELAND.**—July Preliminary Examination:—Messrs. Telford, Getty, Meeke, Bullock, Huston, Lawson, O'Neill, and Kerrigan have passed. Six were rejected. July Licence Examinations:—Messrs. Blackburn, Lees, MacSweeney, Kay, McWalter, Beck, Ryan, Garry, and Moore have been adjudged by the examiners to be competent to act as pharmaceutical chemists.

**A PRACTICAL FRAUD.**—Speaking last week on a case in point, Judge Boyd, of the Irish Court of Bankruptcy, said that arranging traders who came before him with an offer of 4s. in the pound, and who subsequently advanced to 10s., ought to be turned out of business circles. It was, said his lordship, a practical fraud on the Court and the creditors, and as long as he presided he would set his face against the system.

**IRISH HUMOUR.**—Nicholas Harding, a lad of 16, was last week arrested at Dublin on a charge of having feloniously and maliciously thrown a quantity of vitriol, "or other chemical," through the parlour window of a suburban house in which was an evening party. The complainant deposed that a dreadful stench was remarked in the room, coming from a chemical thrown from the garden. The prisoner, when caught, said it was not he who committed the offence, but a companion named Duane, a chemist's assistant, who had procured the compound some days beforehand. The magistrate, in adjourning the case for Duane's appearance, commented strongly on the wanton conduct of the prisoner and his companion.

## Legal Reports.

**PARTICULAR AVERAGE.**—The case of *Pink and Others v. Fleming* was heard in the Court of Appeal on July 15. The plaintiff, in January, 1888, effected two policies of insurance on fruit of the total value of 850*l*. shipped from Messina to London, the policies being subject to the condition "free from particular average, unless the ship should be stranded, sunk, or burnt, or unless the damage should be consequent upon collision with any other ship." The ship collided with another ship on her voyage home, and had to put into Lisbon for repairs. During the time of such repairs large portions of the fruit were discharged into hulks, and thereby damaged, a great part being found rotten on arrival in London. Consequently upon this a claim was made, the plaintiff alleging that the damage was caused owing to the collision. At the trial before Mr. Justice Mathew it was proved that 60 per cent. of the damage was caused by the handling of the fruit in unloading and reloading. The decision of the judge was then in favour of the defendant, and Lord Esher, in upholding the judgment, said that by the law of England the loss insured against must be the result of the proximate cause of

the loss or damage. In the present case it was not the collision which was the proximate cause of the damage, for a collision might happen without such a damage. The collision, no doubt, was a cause, and an effective cause, but not the proximate cause. It happened that the damage caused the necessity for removal of the cargo, and that caused the necessity for handling it, and the handling of fruit injured it. Lord Justices Lindley and Bowen concurred, and the appeal was dismissed.

**"LEWIS'S."**—Before Mr. Justice Kekewich, in the Chancery Division of the High Court of Justice, on July 16, the firm of "Lewis's," wholesale clothiers and general dealers, of Liverpool, Manchester, and Birmingham, brought an action to restrain a Mr. J. M. Lewis, of Preston, from carrying on his business under the title of "Lewis's," and thereby depriving the plaintiff of some of his customers. The plaintiff's firm was founded by the late Mr. David Lewis, but the present proprietor is Mr. Cobens and he contended that the use of the term "Lewis's" by the defendant as a trade name, and on show-cards, circulars, &c., was calculated to deceive people. Mr. Justice Kekewich, in granting the injunction sought, said there was no reason why the defendant should not trade as "J. M. Lewis" or "Lewis," but he was not entitled to call himself "Lewis's." It was said to be the usual way of denoting the possessive case of a name ending with the letter "s" by adding an apostrophe and another "s," but why should the defendant do this when "Lewis" would have described him equally well and more correctly? Costs allowed for the plaintiff.

**CLAIM FOR LOST SYPHONS.**—It will be remembered that in the action of the Chemists' Aërated Waters Association (Limited) *v.* Tborburn, chemist, Drury Lane, the defendant asked that the claim of 18*l.* 7*s.* 6*d.* for siphons non-returned should be referred to the Registrar, as there were questions involved which could not be discussed before His Honour. The report of the Registrar came before his Honour Judge Eddis, Q.C., at the Clerkenwell County Court on Thursday, and was in effect that the defendant owed the plaintiff company, 15*l.* 19*s.*; but the defendant now sought to have the report set aside on the ground that when he paid on a former claim 8*l.* 13*s.*, he understood that the company had no further claim against him. It now appeared that in an action raised last September for sodawater supplied, the amount of 14*l.* 2*s.* 6*d.* was reduced to 8*l.* 13*s.*, but that did not include the claim for siphons not returned. A receipt was given for the amount, when the defendant sent an order for sodawater; but, in place of receiving it, he had the account sent him for the empty siphons. The defendant further urged that the book in which empties were entered did not show from whom the carters received the siphons, and he denied that he was liable for the sum claimed, as all the siphons, with few exceptions, were returned, and he had not had credit for them. The Registrar overruled this objection, and was satisfied that the book in which empties were entered had been correctly kept. His Honour said that he had nothing to do with the former account, which was paid without any stipulation, as suggested by the defendant, that the company had no further claim against him. The case had been repeatedly before the Court, and there had been a great many adjournments, and judgment must be for the plaintiff.

**MARVELLOUS CURE BY A QUACK.**—A well-known quack in the West of Scotland called on a hairdresser some little time ago and asked the barber to shave the hair off his head, which was done. The quack then had his photograph taken showing his bald head. A few weeks afterwards this same hairdresser came across the quack holding forth to a crowd of people to whom he displayed the photo to show that he was completely bald at one time, but he discovered a wonderful remedy in shape of his celebrated hair-restorer, which he had been using for a few weeks, with the result that he now had a flowing head of hair, which, as any one could see, was not false, as it would not come out (giving the hair now and then a good pull to prove the statement). The trick took well, and it was astonishing the quantity of hair-restorer he then sold.



## BANKRUPTCY REPORT.

*Re* CHARLES BENJAMIN SPRAGGE NORTON, 72 Castle Street, Bristol, Chemist.

THE above debtor made an application for his discharge, at the Bristol Bankruptcy Court, on the 5th inst., before his Honour Judge Metcalfe. Mr. Spofforth, who supported the application, said that no dividend had been paid, but this was easily explained. The debtor was in business in a very small way, as was shown by the fact that the stock had only realised 20%. He was induced by a Mr. Powell to enter into partnership with him in a tea-business in Castle Street, Bristol. Mr. W. H. R. Glass and Mr. U. Glass had been sleeping partners with the bankrupt as chemist. Subsequently the business went into liquidation, and the debtor had to file his petition. Mr. W. H. R. Glass had paid 1s. 2d. in the pound, and the other Mr. Glass 9d. in the pound. It was also a fact that the debtor failed about fourteen years ago; but he could not remember how much was paid under the bankruptcy. The debtor was now carrying on a successful business on behalf of his wife, and no doubt he would profit by past experience. The Official Receiver stated that the only persons who had any money to lose in the tea-business were the Messrs. Glass, as Powell had none and the debtor had none; and he was of opinion that the petition should have been filed jointly, as the creditors would then have received 3s. or 4s. in the pound. His Honour finally declined to grant the discharge; but if the debtor thought it worth his while to renew the application in twelve months' time, he might do so.

## Gazette.

### PARTNERSHIPS DISSOLVED.

Berry, J., Kaye, J., & Crossley, J. (under the style of the Elland Aërated Water Company), Elland, aërated-water manufacturers.

Dresser, R., & Folkard, M. (under the style of Rd. Dresser, Folkard & Co.), York, chemists and druggists and aërated-water manufacturers; as far as regards R. Dresser.

Hitchcock, C. G., & Hitchcock, E. L. (under the style of Hitchcock & Sons), Oxford, chemists, druggists, and mineral-water manufacturers.

Hodgkinsons, Treacher & Clarke, Upper Whitecross Street, St. Luke's, wholesale and retail export chemists and druggists; as far as regards W. Hodgkinson.

Tomkins & Gripper, Wallington, surgeons.

Whitehead, A. W., & Shilton, E., Birmingham, surgeon-dentists.

## Trade Notes.

IN Messrs. G. & G. Stern's advertisement of Pepsalia last week the name of the firm in the quotation from the *British Medical Journal* was unfortunately mutilated by a printing mishap, for which we apologise.

THE SODA IMPROVEMENTS COMPANY (LIMITED) has been formed with a capital of 35,000*l.* in 1*l.* shares. Objects: To purchase or otherwise acquire, use, and turn to account, any inventions, improvements, or improved processes for and in the manufacture of soda and other alkaline products, and in particular certain inventions for such manufacture made by Francis Ellershausen.

THE OLDBURY ALKALI COMPANY.—The conversion of the alkali business of Chance Brothers, of Oldbury, into a joint-stock company, under the above name, with a capital of 360,000*l.*, in shares of 100*l.* each, which we recently reported, is, it has been explained, simply a family arrangement. The shares are taken and held by the present partners and their relatives exclusively.

IT WAS MR. STANLEY'S MISTAKE.—We have received a letter from "Benjamin Edgington, Limited," 2 Duke Street London Bridge, notifying us that the canvas for Stanley's tents in Darkest Africa, which, by having been dipped in a

preparation of sulphate of copper, had been found to wear so well, was manufactured by that company, and not—as stated in Mr. Stanley's book and in our review of it a fortnight since—by another firm with a different Christian name.

SIR JOHN BENNET LAWES announces that for family reasons he has registered the business carried on by him at 29 Mincing Lane and the Atlas Chemical Works, Millwall, as a limited liability company, under the style of John Bennet Lawes & Co. (Limited). There will be no changes in the management, and none of the capital (80,000*l.*) is offered for subscription. Sir J. B. Lawes adds: "My personal attention will, as long as possible, be given to the business as hitherto, and associated with me as directors will be Mr. Thomas Bennett, who for the past eighteen years has had an active part in its management, and Mr. George F. Berry, the manager of the factory."

## Personalities.

MR. D. J. EYNON, 87 Regent Street, Leamington, has sold his business, through Mr. F. J. Brett, of Leicester, to Mr. G. P. Wilson.

MR. ERNEST W. GOUGH has purchased the business formerly carried on by Mr. Philip Griffith, at Burnham, Somersetshire.

THE NEW SPANISH MINISTER OF THE COLONIES, Señor D. Antonio Maria Fabié, is a member of the Madrid College of Pharmacists. Mr. Fabié's father was a pharmacist in Seville.

MESSRS. PELLETIER, DELONDRE & LEVAILLANT, of Paris, manufacturers of the "trois cachets" brand of quinine, have entrusted Mr. Rivers Hicks, of Savage Gardens, E.C., with the purchase of their cinchona in London. Formerly the firm bought through Messrs. W. H. Cole & Co.

THE dissolution of partnership of the firm of George Curling & Co., wholesale druggists, of 30 St. Mary Axe, E.C., which was announced in our last issue, affects only Mr. Jeremiah Burch, who has retired from the firm. The business will be continued under the same style as before by the two remaining partners, Messrs. Fred. Shaw and Chas. Aug. Dunn.

MR. GWILYM EVANS, of Llanelly, pharmaceutical chemist, and a member of the Pharmaceutical Council, is spoken of as the probable Liberal candidate for the Parliamentary representation of East Carmarthenshire, rendered vacant by the death of the late member, Mr. David Pugh. If Mr. Evans should be adopted by the party, his return is almost certain, as when the division was last polled in 1885. Mr. Pugh, the then Liberal candidate, was returned by 4,487 against 2,122 given to his Conservative opponent. Mr. Pugh was unopposed in 1886.

## FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

THE SUPERIOR COUNCIL OF AGRICULTURE, at its last meeting, settled the duty on oleaginous seeds at 1s. per 100 kilos. On linseed the duty is to be 5 per cent.

STILL ANOTHER EXHIBITION is announced. The Municipal Council of Lyons has accepted a plan for a National and Colonial Exhibition, to be held in 1892. The temporary offices of the Executive Committee are at 26 Rue de la République, Lyons.

THE LATE M. GÉNÉVOIX.—A subscription has been opened among the shareholders of the Pharmacie Centrale de France and the personal friends of the late M. Em. Génévoix for the purpose of collecting a fund to be devoted to the erection of a monument to the late director of the Pharmacie Centrale.

THE PHARMACIE CENTRALE.—The profits of the Pharmacie Centrale de France (C. Buchet & Cie.) for the year



1889 have been 703,306.65*l.*, admitting of the distribution of a 5-per-cent. dividend to the shareholders, while a sum of 62,285 50*l.* is provisionally carried over, its final application to be decided at the next general meeting.

ONE OF THE FASHIONABLE WEDDINGS celebrated here last week was that between Mr. Roland Faure-Miller and Mdlle. Valérie de Gérin. The bridegroom is a son of Dr. Faure-Miller, the well-known English practitioner in Paris. Nearly all the professors attached to the Paris Faculty of Medicine and many prominent pharmacists were present.

ARMY PHARMACISTS AND VETERINARY SURGEONS.—M. Pagot, Deputy of the Cher Department, has taken up the cause of the veterinary surgeons attached to the French army, with a view of improving their condition. One argument used by him in this campaign is that, while army pharmacists have only to follow a course of three years' study, the "vets." have to give four years. It would seem, however, that the worthy deputy is not specially conversant with his subject, for pharmacists have to serve 7½ years before receiving their diploma for army practice, which is not delivered until the candidate has reached his 25th year.

DISTRIBUTION OF MEDICINES TO THE POOR.—M. Constans, Minister of the Interior, has introduced a special Bill to the French Parliament relative to the preparation and distribution of medicines for the indigent poor. This initiative has been taken by the Minister in consequence of an action brought by the syndicate of the pharmacists of Rouen against the free dispensary of that town. The case was brought before the Court of Cassation, which decided that article 25 of the law dated 21 Germinal, year XI, states positively that none other than pharmacists with diplomas may supply medicines. The question has been submitted to the Consulting Committee of Public Hygiene, with a view to modifying the above-mentioned article 25. As a result, the Government has prepared a Bill as follows: "Medicines prepared by pharmacists attached to hospitals or free dispensaries may be distributed gratuitously under the supervision and responsibility of such pharmacists to patients known to be without resources. The persons charged with these distributions will be nominated by the pharmacist. Their names will be submitted to the prefect for approval."

### TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds of objection to the registration of any of the following marks may within one month of the date of this journal, give notice in duplicate, at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1890, of opposition to such registration." All communications to be addressed to H. Reader Lack, Esq., Comptroller General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

From the "*Trade Marks Journal*," July 16, 1890.

- "OLD VETS," and sketch of pestle and mortar, and horse's head, with name; for veterinary medicines. By Joseph Briggs, 19 Bridge End, Leeds. 97,296.
- "VESTAL VINOLIA"; for chemical substances for use in medicine and pharmacy, and for perfumery and toilet articles. By Blondeau et Cie, 2 Perrin Street, Ryland Road, N.W. 96,082, 96,083.
- "ANTIPERNIO," on circular label, with monogram; for a medicine for human use. By H. Edgell, 9 Fleet Street, London. 97,333.
- "THE MISSIONARY TRAVELLER"; for plaisters (surgical and medical). By A. F. E. St. Dalmas, Leicester. 97,731.
- "ESSKAYESS"; for cubebs, prepared for use in medicine and pharmacy. By S. Smith, Marsh Gate Lane, Stratford. 97,747.
- "RELIANCE," and sketch of a lighthouse; for sponges. By H. Marks & Sons (Limited), 45 Houndsditch, London. 97,756.

Sketch of a safety bicycle; for a perfumed soap. By G. Boehm, 38 Moreland Street, Goswell Road, London. 97,929.

### A MEDICAL STUDENT'S CONFIDENCES.

A *Star* man has been interfering with the prospects of future medical students at the examinations by disclosing secrets told him in what was evidently a confidential conversation. Here is the story as he tells it:—

It was at the Pavilion Music Hall the other night that a *Star* man came across a young man with a check suit of striking pattern, a ruddy face beaming with delight, a big stick, and spirits at boiling-point. After each item of the performance he knocked his big stick vigorously on the floor, and shrieked "Whoo-oop!" with all the force of his big, broad chest. "Whoo-oop" seemed to be the one expression that relieved the bubbling feelings within him, and after a little time he began to discharge himself of it with increased vigour, and without any reference to or occasion of anything that was going on upon the stage. Then he asked half-a-dozen strangers about him to drink, paid for a cigar for a waiter, shouted "Whoo-oop!" again with extra fervour just as Jenny Hill was coming on, brought down his big stick with a thundering smack on the marble counter, and was touched on the shoulder by a six-foot commissioner.

"YOU SEE THAT DOOR?"

said the chucker-out. "Oh, I can see it all right, old chap," said the young man—"I can see two of them. What about 'em?" "Well, that's the door you're going out of if you don't knock off with that stick." It did not affect the young man's good humour. He beamed all over his face, and asked, "Are you the chucker-out?" "I am, sir." "And do you want to chuck me out?" "No, sir; not if you behave yourself." "Well, do you see that glass?" "Yes." "What will you have in it?" The six-foot commissioner turned away with a grin, and the other remarked confidentially to the total strangers around him, "It's all one to me whether they fire me out or whether they don't. They can't alter my getting t' rough, and I don't care. I've just wired home to tell them that I've passed in the first division in all subjects, my 'stifcat's' coming on in the week after next, after the council meeting."

"What is it you have got through?" asked the *Star* man.

"What is it I've got through? Why, my little L.R.C.P., of course. I circumvented the beggars this time. They tried all they knew on me, but I'd got 'em clean beat. They knew they were done as soon as I'd tackled my written."

"What's that?"

"Why, my written paper. I did that the day before yesterday down at the Examination Hall, on the Thames Embankment, you know. As soon as I looked through the questions I knew I'd circumvented 'em, sure. I did a champion record on my little written. I answered all the questions, handed in my paper, and was outside talking to the porter an hour and seventeen minutes and eighteen seconds before the next man came out. I timed it with my little watch, and waited to see. I asked the porter if he didn't reckon it was

### A CHAMPION PERFORMANCE,

and he said it was the quickest he ever heard of. I gave him half-a-crown. I knew I'd circumvented 'em this time. You should just have seen the look on the examiner's face when I handed my paper in. He pulled his gold watch out and looked at the time, and couldn't believe his eyes. He looked as savage as a mad dog, but I didn't care how he looked. I knew I circumvented him, and that was good enough for me."

"Do you think he didn't want you to pass, then?"

"Of course he didn't. Examiners, they're the savagest lot you could possibly name. I've always had my knife into examiners ever since my Preliminary. They're a moderate lot, take 'em all round. They don't know a lot themselves. Half of 'em couldn't tell a case of cirrhosis of the liver from a crick in the neck, and they're that savage to think you know a lot more than they do that they try all they can

TO FOG YOU.

But I've circumvented 'em this time."

"Have they circumvented you many times?"

"Cruel. This makes three times I've been up for my



little L.R.C.P. First time I was referred for three months; second time, when I made sure I'd done all right, I'm blessed if they didn't go and refer me for another six months. But, besides that, I've been referred before on all the subjects you can mention. I know every station on the road up to London, through coming up so many times to be examined."

"You come from one of the provincial schools, then?"

"Yes. You see the London students have a big pull over us, especially in the clinical."

"How's that?"

"Well, I'll tell you. You see, when you go up for your clinical they get a lot of cases out of the hospitals—the hardest cases they can think of, and they get 'em there, lying in bed, and try all they can to fog you over there. Well, suppose a chap's at Guy's; he's very likely seen one or two of the cases he's examined about every day in the hospital. Or very likely he's heard about 'em. Why, one chap was being taken in his clinical by old Duckworth—Sir Dyce Duckworth—you know him; and the first case he's taken to he looks at the chap's face and

#### HE KNOWS HIM IN A MINUTE.

He'd seen the case every day for weeks, and knew a dashed sight more about him than old Duckworth did. So he just reels it off like a book, and every question Sir Dyce puts to him he answers. So Sir Dyce takes him on to another case in another bed. And as soon as he saw the case he recognised this one just the same. He'd got it all off by heart, and old Duckworth couldn't fog him any road. So they go on to another bed, and when the chap looked he thought he was done sure, for it was some strange case they'd got in, and he couldn't make head nor tail of it anyhow. He could see old Duckworth meant doing him this time, so he tries a game on. When Sir Dyce says, 'Well, what's the matter with him?' the chap don't cave in. Not he! He says, as bold as a lion, 'I feel bound to tell you, Sir Dyce.' 'Well?' says Sir Dyce. 'I feel bound to tell you that I've seen that case in hospital!' When he said that it fairly knocked old Sir Dyce off his perch. He says,

#### 'THAT'S VERY HONEST,

very honest, very honest'; and goes and signs him through in the first division. We can't circumvent 'em that way, because they never bring any cases up from Birmingham or Leicester or Bristol, and the London chaps have all the pull of us."

"You managed your clinical all right?"

"Circumvented 'em completely. First case I had was a hob-nailed liver, and I knew it all backwards, and the other cases just as well. I went a bit rocky, though, on my little *viva voce*, but I managed to dodge 'em. When I went in there was one chap sitting at one end of the table with a lot of sections of brain before him, and another at the other end with liver. I'm weak on brain, but I'm particularly strong on liver, especially hob-nailed ones. So I went for the liver-end of the table like a knife. You have to be artful with those chaps, you know, and I was artful with mine. I pinned him on liver. Whenever he showed any signs of getting on to any other subject I kept saying something that made him want to ask

#### ANOTHER LIVER QUESTION.

So I circumvented him that way. I've done with the old Examination Hall now. I'll bet my case of instruments to nothing that they never see me down there any more. See that gum-lance. That's a nice bit of workmanship, that is. Real tortoiseshell the handle is, and you just feel the edge with your thumb and see how sharp it is. You haven't got a gumboil or anything I could lance for you, have you? Let me put my hand between your shoulders. Now draw a full breath, and say 'Ninety-nine.' Now lean forward and say 'Ninety-nine' again. Now say 'One, two, three!' You've got a very curious vibration—very curious. I should like to sound you if I'd got my little stethoscope with me"

"You're fully licensed to kill now?"

"Oh, yes. I'd got my College of Surgeons before, you know."

"Was this a difficult examination?"

"The hardest on record. In the written they put one very

artful question. It was to describe the post-mortem signs in a case of drowning as distinguished from a case of ordinary suffocation. I tumbled to that. Of course, in a case of drowning the body would be wet. I had 'em there."

## Obituary.

ALLCHIN.—On July 13, Alfred, eldest son of the late Alfred Allchin, pharmacist, of England House, Hampstead. Aged 38.

ASHTON.—On June 29, 1890, William Ashton, pharmaceutical chemist, aged 89. He was born at Louth, Lincolnshire, in 1801, and was an apprentice at the time of the Battle of Waterloo. He was in business at Alford, Lincolnshire, for many years, and was one of the founders of the Pharmaceutical Society and the Benevolent Fund, to which he contributed the sum of 500*l*.

CLARKE.—On July 12, at 79 Rosba Drive, Glasgow, Joseph Adam Clarke, A.Ph.S., chemist and dentist, of 148 Gallowgate. Aged 42. By Mr. Clarke's lamentably early death a familiar and much-respected personality disappears from the circle of Glasgow pharmacy, in the best interests of which he spared neither time nor energy. At different times as secretary, librarian, and treasurer of the Chemists' Association, and convener of the price-list committee of that body, he rendered valuable service. He took the principal part of the work in compiling the price-list, seeing it through the press, and attending to its sale. Nor was his beneficent activity limited to his pharmaceutical associations. In the temperance movement, in Church affairs, and in all social agencies having the physical and moral well-being of the poorer classes in view, Mr. Clarke took a part. He began business about 1870, succeeding his father in London Street. The shop was notable on account of its "dental window," garnished with an enormous collection of extracted teeth, and also as an emporium for every kind of simple known to so-called medical botany. About ten years ago Mr. Clarke removed to the Gallowgate address, which has been occupied as a druggist's shop for the last 100 years. Mr. Clarke had been ailing for some time, and succumbed finally to a glandular growth, which gradually acquired a malignant character. He is survived by a widow and a young family.

GRIFFITH.—On July 5, Mr. Samuel Griffith, pharmaceutical chemist, 35 High Street, Weston-super-Mare. Aged 33.

NESTLÉ.—Mr. Henry Nestlé, the inventor of "Nestlé's Food for Infants," died at Montreux, in Switzerland, on July 8, about 70 years of age. He was a German by birth, Wurtemberg being his native country. Mr. Nestlé was educated as a pharmacist, and came to Switzerland in that capacity some 45 years ago. In 1867 Mr. Nestlé, after experiments extending over many years, succeeded in bringing out, in a commercial way, the food which has made his name famous and the factory at Vevey one of the most important industrial works in the country. Within a few years of its establishment, Mr. Nestlé sold his business to a company for 40,000*l*. He had retired from active business for some years, and spent his time and money in works of a philanthropic character.

A FEW suggestions culled from accounts of cases of "accidental death" during the past week may prove of service to those who are not ingenious enough to think of them for themselves. Mix some coarse flour and strychnine to kill the rats with, then place the mixture in a jar similar, and as near as possible, to that containing the family oatmeal. Place some laudanum in an empty medicine-bottle, and stand it alongside a bottle of physic on a table by your bedside; take a dose from the nearest bottle in the dark—ten chances to one it's the laudanum. Pour some carbolic acid into a beer-bottle, cork it, and put aside in a cool spot. The next person who comes along with "a mouth on him" will find it a vast improvement on common or ginger beer. Smear a piece of bread with phosphorus paste, and leave it in a eupboard well within reach of marauding youngsters. If their lives are insured, you will have no reason to regret the experiment.—*Macclesfield Advertiser*.



## A TALK ON THE INDIAN DRUG TRADE.

AMONG the callers at the editorial office of this journal last week was Mr. Bertie Smith, a Bombay drug merchant, who has taken advantage of the slack season in India to pay a visit to the old country, and may probably also take an excursion to the Continent before he returns to the tropics.

Mr. Smith went out to India some five or six years ago as a pharmacist, but soon discovered that his horoscope prognosticated brighter things than the dispensing of prescriptions behind someone else's counter. Accordingly, he started in business for himself, and is now carrying on a trade as an export and import drug merchant. Mr. Smith thinks that there would be a splendid opening in India for a firm of sufficient capital who would be willing to embark in the establishment of a wholesale trade on European lines, and make a feature of the introduction of novelties as quickly as possible. They are still inconceivably slow in business in India, and many articles which might find a good market there are quite unknown simply because nobody has taken the trouble to introduce them properly. "Take the penny automatic machines, for instance," said Mr. Smith. "I do not believe there is a single one in India at the present day, and yet I am so sure that they would be a success there that I feel strongly inclined to take out a few myself to start them."

"Which kind do you think would be the most suitable—the sweetmeat machines?"

"Oh, no; the natives would not eat the sweets—it would, in their opinion, defile them. And it is to the natives that we must look to make such things pay, as the European population is too small. I was thinking of matches, cigars, and, above all, of scents. Of course the machines would have to be fitted to suit our *anna*-pieces instead of the British penny."

"German competition" is Mr. Smith's bugbear, and he is of opinion that if our druggists do not put their shoulder to the wheel with more energy than in the past, and recognise that the days of long profits are gone for ever, they will be ousted altogether by their German rivals. A great many German houses now cultivate an Indian trade, and one of these has been particularly successful, though it has never sent out a single traveller to India. This firm will forward 5-lb. packages of assorted drugs from Germany to any house, English or native, and some of their preparations are known in every small druggist's shop throughout the country. Goa-powder is one of these. It is used in India in enormous quantities. The firm in question put it up in labelled penny bottles, which they sell by the hundred gross. Beyond some slight sifting and the putting-up, no labour whatever is involved in the preparation of this article, which is simply the usual Goa-powder of the London market. Yet it is a fact that, at the present day, practically none but German prepared Goa-powder is seen in India. There have lately been several cases of adulteration of this drug, one of the spurious imitations being composed simply of a mixture of cutch and insect-powder, which, in appearance, is almost indistinguishable from the true article.

Our visitor thinks that there are still an enormous number of Indian drugs, now practically unknown in European commerce, which are destined to become of immense therapeutic and industrial importance. He instanced, among others, the Indian podophyllin which we noticed in our issue of May 31 last. The trouble is that it is almost impossible to manufacture any drugs on the spot, owing to the cost of erecting works, but especially to the exorbitant price of alcohol and other materials indispensable in chemical manufacture, otherwise it would of course be the best plan to extract the resin from the root on the spot; but now it is thought that the only profitable way to develop an export trade in this and similar articles is to ship them in the raw state.

Until Mr. Smith took up the business, the collecting and sorting of drugs for shipment in Bombay was entirely in the hands of native dealers, who obtained advances from the actual exporters, mostly European houses doing a general export and import business, and who, as a rule, possessed no

knowledge whatever, or only the most rudimentary one, of the goods on which they advanced money. The results of this mode of dealing have been frequently apparent at the London drug sales. Mr. Smith employs a number of natives to collect and sort his drugs under the guidance of the half-caste Goa-Portuguese, who form a kind of stepping-stone from the European to the native.

*Cannabis Indica*, the "guaza" of our drug sales, is likely, our visitor tells us, to advance in price, as the crop in Bengal, where large quantities of the drug are collected, has failed. The cultivation and sale of this herb are very carefully watched by the Indian Government officials on account of the high duty to which it is subject as a narcotic. The herb ripens in April, and is dried quickly on the fields, where it is purchased from the growers by the exporters. It is carried to the shipping ports under Government control, and the officials only take their leave of it when it is safely on board ship. The duty on the drug in India is equivalent to about 3s. per lb.

In the near future it seems likely that Bombay will lose much of its importance as a market centre where Persian, Italian, and African produce is now sorted and prepared for the European market. *Asafoetida*, for instance, which, until now, has reached us almost exclusively *via* Bombay, where the natives might be seen "preparing" it for Europe by mixing alternate layers of rubbish and *asafoetida* and kneading the mixture under the feet into a mass, which was subsequently further mixed with stones or talc, is likely to come to us in future direct from Persian harbours, or by way of the Turkish port of Bussorah, where the combined Euphrates and Tigris rivers fall into the Persian Gulf. The reason of this displacement of trade is that the British Indian Steam Navigation Company, who formerly concentrated their trade at Bombay, now run direct steamers from the Persian ports, and from towns on the East African littoral, to London. Noticing upon our table a copy of the "*Pharmacographia Indica*," our visitor observed that Dr. William Dymock, one of the authors of that work, has just retired from his post as principal medical storekeeper to the Indian Government on an annual pension of 600*l.*, with an extra 100*l.* allowance. Dr. Dymock is now about sixty years of age, and has well earned the rest he proposes to enjoy. His successor had not been appointed when the last mail left, but it was thought probable that the place would be given to a native.

## SHOP HOURS.

THE HALF-HOLIDAY.—A notice has been published over the signatures of twenty-three chemists of York announcing their intention to close at 1 P.M. on Wednesdays until September 30. Mr. Parkin and Mr. Knowles, of Blossom Street, were the first among the chemists to conform to the arrangement, which they did without waiting for a general compact. Four other chemists close at 4 P.M.

THE THURSDAY CLOSING MOVEMENT at Nottingham has received an impetus from the action of the Chemists' Association. Several chemists in the centre of the town now close at 1 o'clock for the remainder of the day, others close at 5 P.M., while in the suburbs the custom of closing from 1 to 6, established a few years ago, has been more generally adopted. Next Thursday, July 24, having been fixed as the date for the annual picnic, several chemists have decided to close in the evening as well as afternoon in order to attend.

EARLY CLOSING.—Our Liverpool correspondent writes:—It is to be regretted that the endeavours to obtain a general agreement among Liverpool chemists to close at 9 P.M. are not more successful. Only a very few seem to have thought it worth while to exhibit the small notice calling attention to the fact, and things remain much as they were before the well-meant steps were taken. At Runcorn, however, thanks principally to the energy of Mr. J. H. Weston, who has lately purchased the business conducted for so many years by Mr. Geo. Marshall, the chemists have acted more spiritedly, and have decided to close their places of business from 1 to 6 P.M. on Wednesday afternoons.



## THE PHARMACEUTICAL SOCIETY'S JUBILEE.

## SUGGESTIONS FOR ITS CELEBRATION.

WE had a very poor response to our invitation for suggestions of the most fitting means for the Pharmaceutical Society of Great Britain to celebrate its jubilee next year (1891). We gather, from our two or three comparative failures of late, that our subscribers are tired of postcard competition for the present, and we have duly taken the hint. We will let the matter drop for a few months.

We received somewhere between 50 and 100 suggestions, but very few which were at the same time feasible, serious, and novel. A dinner seems to be the favourite form of celebration, then comes an exhibition, and the third scheme in order of popularity appears to be the foundation of some charitable institution. Apprentices think some benefits might be showered upon them, and several correspondents make proposals with a sublime indifference to cost. A few are humorous. *Columbus*, for instance, proposes "to endow a research laboratory in order to discover where trade interests have vanished, and, if dissolved, to find by what reagent they may be brought up again." *Dolor* recommends "the Pharmaceutical Council to issue a three-line whip to chemists, urging all those who do not already do so to celebrate the jubilee by sending 10s. to 42 Cannon Street, and having in return something that does what they (the Society) never do—viz., place trade interests first." This is correct, at least, so far as the value for the 10s. is concerned; but it would affect so few people—most chemists are already aware that it is good business to give half-a-sovereign for a sovereign—that we cannot award the prize to this competitor. Here are specimens of the other suggestions:—

Raise a fund to found and endow an orphanage for the children of chemists and druggists who are left destitute through sickness or misfortune.—H. W. G. MORRIS, Thame.

Have a grand *conversazione* in its new building, giving special invitations to qualified and unqualified non-supporters of the body, and let the next half-century (if it may so long exist) be devoted more to the trade than the professional side of pharmacy.—D. G. JAMES.

In London a chemical, botanical, horticultural exhibition, moderate charge, vendors to adopt costume of pharmacutists of different nations, Arab and Indian medicine-men, &c.; entertainments of appropriate declamations, monologues, as Friar Lawrence's soliloquy ("Romeo and Juliet"), &c. Chemical and scientific experiments; erections and models. Funds (surplus) to be devoted to establishment of school and foundation for higher education of children of chemists whose circumstances will not permit them to give to their family advantages commensurate with their position. In the provinces, an afternoon conference on subjects of general interest to the profession; and evening entertainment, to which chemists, their families, and assistants, be asked to contribute, the public to be admitted at moderate charges, and funds to spare devoted to same object as London "Sciencerics."—E. G. BELL.

No dinner; short speeches—shorter the better. A one, two, or three days' pharmacy exhibition at 17 Bloomsbury Square, made as interesting as possible; and borrow some private grounds (botanic or otherwise) for an evening to hold a Baden-Baden promenade concert, good band, coloured fairy lights, and closing, if practicable, with a display of fireworks.—C. W. BIRCH.

1. Establish an orphanage for chemists' children left unprovided for, to be founded on a sum received by donations asked for by the Pharmaceutical Society, deficiency made up by the Society. If this scheme be too expensive, the following will cost little to keep up:—2. To expend 1,000l. or more to purchase (a little way out of London) a small freehold, and build a few almshouses, for a home free of rent for aged registered chemists, their widows, and old couples, under certain conditions—viz., each to be elected by vote, preference given to those who formerly subscribed to the Pharmaceutical Benevolent Fund, and recipients to be over a certain age, &c.—JOHN HOLDING, Barnsbury.

1. To strengthen and consolidate the Society (*a*) by admitting all registered chemists and druggists as members, to be eligible as voters and for election to the Council; (*b*) By appointing one local agent to look after the interests of the Society for each Parliamentary division. 2. To pass an amended Pharmacy Act, with the following provisions (amongst others):—(*a*) The compounding of medical prescriptions, whether containing poison or not, to be the exclusive duty of qualified chemists and druggists; (*b*) The word "person" in the Act of 1868 to include "persons"; (*c*) The custom of displaying coloured show-bottles and emblazoned jars (being as much a distinctive sign—by long usage—of the legitimate chemist as the titles "chemist," "druggist," &c.) to be protected in the same manner as the titles; (*d*) Carbolic acid to be added to the poison schedule, and the sale of stamped medicines containing poison declared illegal except by registered chemists.—T. C. E. OSBORNE, Manchester.

To enrol all chemists and druggists on the register—whether in business, or as assistants or apprentices—as members or associates of the Society; and after that to close its doors to all but those who are able to pass the examinations of the Society.—W. F. WILLIAMS, Longfleet, Poole.

Enforce the Pharmacy Act to prevent unqualified persons keeping open shop and selling scheduled poisons and proprietary medicines containing scheduled poisons, by making a general prosecution, and so protecting the ordinary retail chemist, who would then subscribe, and greatly strengthen the Society.—T. SANKEY, Blackpool.

Organise a thoroughly comprehensive exhibition of pharmaceutical apparatus, appliances, productions (raw and manufactured), from the earliest times up to the present date, to be opened by their Royal Highnesses the Prince and Princess of Wales; and, in conjunction with this, reduce the compulsory subscription of chemists in business to 10s. 6d. per annum, and proclaim a free pardon (*i.e.*, remit the fine) to all who have qualified, and who, being in business on their own account, may have, at that date, omitted to keep up their subscription to the Society.—J. W. DAWSON, Lincoln.

I propose that the members of the Pharmaceutical Society and their friends and supporters should dine on a particular day, at a certain house, in every place in the kingdom (also in the Colonies) in which three or four druggists of any grade reside, to get up the dinner, inviting every friend or ally. Then, after the men have well eaten and drunk, and reached the state of perfect satisfaction, let the hat go round, and the net proceeds be devoted to the Benevolent Fund.—ONE ON THE FOUNDATION.

Exhibition. — 1. Large Central Hall.—On each side of entrance an apothecary's shop of 1660, fitted as at that time with drugs and general feature of houses, with old apothecary attending inside, and sedan chairs outside to be let out on hire. Opposite entrance a modern pharmacy fitted as they are now. On either side of hall-sections: (*a*) Exhibiting various sponges, method of gathering, and periods of growth; (*b*) Dentistry; (*c*) Collection of vegetable, animal, and mineral substances used in medicine; (*d*) Photography; (*e*) Perfumes, with flowers from which they are made; (*f*) Library. Two rows of pot-plants dividing hall lengthwise into three parts, showing growth of plants used in medicine, &c., besides culinary articles; with here and there along the rows cases, provided by patentees, showing their goods. Issue description of various departments in book form, for sale in hall, printed in old English, and old pictures relating to trade, and short history. 2. Side Hall or Lecture Hall.—Give lectures relating to trade and on chemistry, with interesting chemical experiments—interesting to the general public. 3. Gardens surrounding, with band and waterfall, and illuminations at night; with conservatories having tropical plants that are used in medicine. 4. Give a ball to members of profession to close exhibition.—F. BIDIE, Banbury.

(1) That a flag be floated over the Society's premises for at least three months during the year. (2) That the foundation stones for a new building be laid on the site adjoining the Society's premises, to be opened as a museum on a large scale for the exhibition of chemical, pharmaceutical, and botanical specimens, &c. (3) That a dinner be given the same evening, to which all members be invited, after which the President be presented with a gold, and the other members of



the Council with a silver, jubilee commemoration medal (tickets 10s. 6d.). (4) That excursions be arranged the day following (from various centres), open to members only, followed in the evening by a (5) gigantic conversazione (public, 7s. 6d.) at South Kensington (members' tickets, for both, 10s. 6d.). (6) That there be a special jubilee commemoration medal struck, for sale to all chemists on the register at 5s. each. Ladies admitted to all meetings, &c. Proceeds to benevolent fund.—G. F. EGG, Camberwell.

To hold "an international congress, and exhibition of pharmaceutical products, &c." in London next year.—T. H. Belfast.

To hold a banquet on the jubilee day, invite leading chemists and representative men interested in science relating to medicine. Secretary to read a report showing the progress of chemistry, pharmacy and materia medica during the past fifty years, and the part registered chemists have played in its advancement, proving the wisdom of the founders of the Pharmaceutical Society in establishing such an institution. Give a gold medal annually for the most important contribution to pharmacy, chemistry or materia medica by a registered chemist, stimulating research. Give the President of the Pharmaceutical Society a gold medal and the members of the Pharmaceutical Council each a silver medal in commemoration of the jubilee. The medal to have engraved on one side the first President's head, and Mr. Carteighe's on the other.—A. DYSON, Grays.

To raise a special fund, to either purchase or build a row of, say, six or eight almshouses, in some cheap part of either Kent or Essex (similar to the Merchant Taylors' at Sutton Valence, and the Fishmongers' at Harrietsham, both in Kent), for broken-down members of the trade.—QUI HAYE.

I should recommend 1,000*l.* to be carried from the general to the Benevolent Fund, the interest of such sum to be applied to augment the secretary's casual fund. 1,000*l.* from the general fund to provide prizes of books or scientific apparatus to students or apprentices under 19 years of age who shall pass a satisfactory examination, the subjects to be the same as those for the Bell and Redwood scholarships. The interest of the above sum might be divided into three portions of, say, 20*l.*, 10*l.* and 5*l.* 1,000*l.* from the general fund to be applied for the foundation of a research scholarship, open to pharmaceutical chemists under 25 years of age, the holder to spend six months in the research laboratory of the Society and devote his whole time to work which should have a direct bearing to pharmacy and not to some abstruse chemical curiosity. Or the last-named sum might be devoted to the formation of an annual oration fund to be conducted on the same lines as the Harveian and other orations, to be delivered by a pharmacist of note, who should be required to take as his basis an original investigation on a drug or pharmaceutical preparation.—MIRABLEU.

2 o'clock.—Great meeting at Crystal Palace of chemists of the United Kingdom. 6 o'clock.—Monster banquet. 9 o'clock.—Grand display of fireworks (set-piece, pharmaceutical arms); halloon ascent; burning colours suggestive of the different chemicals and minerals. 10 o'clock.—Monster ball.—W. MILES, Scarborough.

By passing a short Act to license those managers and assistants who, satisfied with their lot, did not read up for the Modified, and now feel too old to do so. They might issue poison-selling licences at a guinea a year.—F. R. P.

Mr. A. H. Cleland, Leytonstone, proposes to found scholarships for apprentices by competition in a manner which he sets forth, and which would somewhat correspond with our "Corner for Students." Those who had attained a certain number of marks to be entitled to compete.

We confess we do not find ourselves astonished by any of the ideas submitted, and we find it difficult to fix on the one which rises far enough above mediocrity to deserve the top place. We give the preference ultimately, however, to the suggestion offered by "One of the Foundation," his idea of getting chemists together in all places as far as possible at one time, to toast their Society, and to contribute to the Benevolent Fund, being perhaps the most feasible, effective, and complete way of celebrating the Society's jubilee which has been proposed on any of our postcards.

The guinea is, therefore, awarded to Mr. R. G. Mumbray, pharmaceutical chemist, Richmond, Surrey.

## PROCTOR'S "MANUAL OF PHARMACEUTICAL TESTING."

"A MANUAL of Pharmaceutical Testing for the Man of Business and his Assistants; comprising simple instructions for the testing of the chemicals of the British Pharmacopœia, &c.; with such materials and appliances as are in common use at the dispensing-counter. By Barnard S. Proctor, F.I.C. Published at the Offices of THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C., and at Melbourne and Sydney. 1890." Price 2s. 6d., or 2s. 9d. post free.

We quote below the opinions of a few gentlemen specially qualified to appreciate this manual:—

Mr. Proctor's well thought-out little manual fills a blank, and is entitled to a place in every pharmacy. Chemists should encourage their assistants to use the book.

HARRY CARTER DRAPER, F.C.S.,  
Examiner in Pharmaceutical and General  
Chemistry, Ireland.

Mr. Proctor's "Manual of Pharmaceutical Testing" is a volume which should be on the desk of every pharmacist and at the command of every assistant and apprentice. There need be no hesitation in asserting that it is one of the most useful and important adjuncts to the Pharmacopœia yet published; and this, be it understood, not so much because it treats of those impurities which every honest pharmacist is bound to search for and detect, as from the fact that it treats of them in a way which even the most henighted cannot misunderstand, and this, too, with the very materials and appliances with which his every-day work is surrounded. Ahjuring the ultra-scientific, Mr. Proctor has brought his long and varied experience to bear upon a plain, practical, every-day exposition of the impurities commonly met with in pharmacopœial chemicals, and the simplest methods of detecting them. In doing this he has never condescended to pharmaceutical platitudes, nor has he padded his book with tedious, unnecessary, and often doubtful processes. In plain, terse language very characteristic of the author, every probable impurity is noted, and its detection, as clearly and shortly indicated. Many of the tests are the result of Mr. Proctor's own investigations, while others, gleaned from a variety of sources, have had his extensive practical knowledge brought to bear upon them, with the result that in many cases they have been modified and simplified in various directions. It is almost unnecessary to add that every test may be relied upon so far as pharmaceutical adulteration is concerned.

WILLIAM GILMOUR,  
Examiner in Chemistry on the Scottish Board of  
Examiners of the Pharmaceutical Society.

We manufacturers not unnaturally cherish the idea that our reputation renders unnecessary the testing of what we supply, and perhaps it is as well we should be reminded from time to time that there should be no relaxing of the determination to do our best, or of the care and vigilance necessary to achieve it. Proctor's "Manual of Pharmaceutical Testing" is such a reminder, and likely to be a permanent one. But it is more than this. It has a high educational value, and no student of the Pharmacopœia should be without it any more than the pharmacist in business. The former finds short, crisp explanations of tests which add interest to his study of the Pharmacopœia; the latter, equally crisp instructions for testing before stocking, which leave him no excuse for neglecting this duty on the plea that his knowledge is become rusty from disuse, or that he has no laboratory set apart for chemical work; his knowledge is refreshed; his counter or back-shop supply all laboratory requirements. Yours faithfully,

Galen Works, Deptford.

JOHN MOSS.

The design of Mr. Proctor's book is to supply, in an easily intelligible form, the information that will enable a business man to test the preparations he uses, and to ascertain whether they are pure, and of the proper strength. In such a work it is necessary to assume that the reader possesses



very little knowledge of analytical chemistry, and that he has at his service only such reagents and appliances as are furnished by the ordinary dispensing-counter. The author has succeeded in attaining the object in view. The instructions he gives are clear, and free from technicalities, and anybody could understand them. The book abounds with useful hints and ingenious devices, and it is evident that it embodies the result of an extensive experience. It is one which every pharmacist ought to have; the most expert chemist may learn something from it, and those who are not expert at analysis cannot well do without it.

RICHARD J. MOSS,  
Conductor of the "Corner for Students"  
in THE CHEMIST AND DRUGGIST.

The "Manual of Pharmaceutical Testing" is just the thing for the busy pharmacist. Practical, concise, and easy of reference, it gives him the tests by which he may ascertain the purity of most of the leading chemicals, preparations, &c., the quality of which it is his business to know.

W. M. SEARBY,  
Professor of Materia Medica in the College of  
Pharmacy, San Francisco.

It contains much that is original, and is always practical. The descriptive matter is clear and concise; the processes require ordinary care rather than skill for their performance, and the apparatus employed is of the most simple kind, such, in fact, as should be found ready to hand in every pharmacy. Liverpool.

CHARLES SYMES.

Mr. Proctor's "Manual of Pharmaceutical Testing" will, I believe, be found very useful to busy men who have not the appliances for doing systematic volumetric work, but who nevertheless desire to be able to guarantee the purity of the drugs and chemicals they vend.

I do not like his method of estimating acidity by the amount of magnesium carbonate dissolved, but as a rule the processes described are extremely practical, and will, I think, in most cases fairly answer the question—"Is the article fit for use?"

Yours truly,

W. H. SYMONS,  
Examiner in Chemistry on Board of Examiners  
(England) of the Pharmaceutical Society.

## PHOTOGRAPHIC NOTES.

(Written for THE CHEMIST AND DRUGGIST.)

### CHLORIDE OF MAGNESIUM FIXING BATH.

The formula recommended for this bath is as follows:—

Chloride of magnesium	..	..	15 grammes
Alum	..	..	2 "
Water	..	..	100 ccm.

The addition of alum prevents the magnesium salt from attacking the gelatine film, which it is otherwise likely to do. One of the disadvantages of this salt is that, if it is not properly eliminated, the prints are in a continual state of dampness, the magnesium chloride acting as a sort of perpetual hygrometer.

### TONING WITH METALS OF THE PLATINUM GROUP.

M. Pierre Mercier suggests, in the *Comptes Rendus*, that palladium, iridium, and osmium will tone silver prints in a somewhat similar manner to platinum in the platinous state; he recommends the following method of preparing a platinum toning-bath, which is so easy that anyone with a spirit-lamp or Bunsen burner and a porcelain dish can prepare it. The process is merely boiling 2 grammes (31 grains) of platonic chloride, dissolved in a little distilled water, with 1 gramme (16 grains) of neutral sodium tartrate till the yellow solution assumes a dull grey colour, then making up the solution to 1 litre (35 oz.) with distilled water and adding 5 c.c. (1½ drachm) sulphuric acid. The sulphuric acid in this formula may be replaced by nitric or hydrochloric acid, but with the latter the proportion should not exceed 3 parts in 1,000, because hydrochloric acid not only tends to render

the chloro-platinite more stable, but also exerts a bleaching action on the print. Organic acids may be used, except formic, tartaric, and oxalic, which have a tendency to reduce the platinous salt to the metallic state by the action of light alone.

M. Mercier also states that ruthenium and osmium are not applicable for toning, a yellow tinge only being communicated to the prints, although from some few experiments which we have carried out, these metals may be made to give brown images by means of formic and oxalic acids, but the whites and details of the prints suffer. Palladium also may be used, but with the same defect, the bath recommended being:—

Palladious chloride	..	..	2 grammes
Sodium chloride	..	..	1 gramme
Acetic acid	..	..	200 grammes
Water	..	..	1 litre

The yellowness of the whites caused by this bath may be removed by treatment with dilute ammonia, but the tint returns after fixing, and seems permanent. Iridium gives tones resembling those of gold, the bath suggested being:—

Chloride of platinum and iridium	..	1 or 2 grammes
Sulphuric acid	..	5 "
Water	..	1 litre

This double salt, chloride of platinum and iridium, was used in the now almost extinct process of photo-ceramic enamels, and gave an exquisite purple-black tone of great brilliancy. Osmium gives tones different to those obtained by any other salt—the prints assuming, first, a sienna-brown tint, then, as the action continues, the half-tones and delicate details turn bright sky-blue, and, in some cases, a pleasing effect is obtained by arresting the action at this point, when the deep shadows are rich brown and the high lights sky-blue; if the action is allowed to continue, the whole of the print assumes this tint. The following toning solution is suggested:—

Ammonia chlorosmite	..	..	1 to 2 grammes
Acetic acid	..	..	20 "
Water	..	..	1 litre

If a mineral acid be substituted the final tone is violet, and the whites are apt to suffer.

### MOUNTING PASTES.

(1)		Oz.
Nelson's No. 1 photographic gelatine	..	4
Water	..	16
Glycerine	..	1
Alcohol	..	5

Dissolve the gelatine in the water, then add the glycerine, and lastly the alcohol.

(2)		Parts
Arrowroot	..	10
Water	..	100
Gelatine	..	1
Alcohol	..	10

Soak the gelatine in the water, add the arrowroot, which has first been thoroughly mixed with a small quantity of the water, and boil four or five minutes. After cooling add the alcohol and a few drops of carbolic acid.

(3)	Best Bermuda arrowroot	..	1½ oz.
	Sheet gelatine or best Russian glue	..	80 grains
	Water	..	15 oz.
	Methylated spirit	..	1 oz.

Put the arrowroot into a small pan, add 1 oz. of water and mix it thoroughly up with a spoon, or the ordinary mounting-brush, until it is like thick cream; then add 14 oz. of water and the gelatine broken into small fragments. Boil for four or five minutes, set it aside until partially cold, then add the methylated spirit and 6 drops of pure carbolic acid. Be very particular to add the spirit in a gentle stream stirring rapidly all the time. Keep it in a corked stock bottle and take out as much as may be required for the time, and work it up nicely with the brush.



## Medical Gleanings.

### CHIAN TURPENTINE PILLS.

DR. BANTOCK records a case (*Brit. Gynaecol. Jour.*) in which he prescribed Chian turpentine pills made according to Clag's formula, and some weeks after the patient complained very much of pain on defecation. Several enemas had to be given, and at last a large mass came away about the size of a Tangerine orange, which was composed almost entirely of the pills.

### STROPHANTHIN.

At the Vienna Congress Dr. A. Rothziegel read a paper on strophanthin, which was very favourable to the glucoside, and confirmed Fraser and others in their observations. The experiments demonstrated, for example, that the tincture of strophanthus was on the whole preferable to strophanthin: it was more certain, rapid, and energetic in its effect, especially as regards the urine. Where, however, neither the tincture nor digitalis was well borne, strophanthin was often a useful substitute.

### OIL OF CEDAR.

THIS oil is poisonous in large doses. It is used in the United States as an abortive, and for suicidal purposes. It does not appear to succeed in producing abortion, but it is sometimes fatal: as little as a drachm may cause heart failure and death. The oil is also used for gonorrhœa, and the fact that it is used as an adulterant of and substitute for sandal-wood oil warrants our calling attention to the dangerous character of the oil in large doses. From 5 to 10 drops should not be exceeded.

### ANTISEPTIC ACTION OF SODIUM SILICOFLUORIDE.

MR. E. L. JONES, M.B., in a note to the *British Medical Journal*, states that in the course of some experiments on pancreatic digestion, he required to keep the fluid aseptic, and he used sodium silicofluoride. It was noticed that the addition of sodium bicarbonate completely destroyed the antiseptic property of the salt, there being effervescence on this addition and apparent decomposition into silicate and fluoride of sodium. The silicofluoride seems to act by precipitation of proteid in a somewhat similar fashion to the action of mercuric chloride and alcohol on proteid.

### CREOSOTE MIXTURE.

THE use of creosote in the treatment of phthisis makes but slow progress in this country: probably, if the preparations of it were pleasanter we should hear more of it. Here is a nice thing which Dr. A. Eichlecher communicates to the *Druggists' Circular*:—

Creosote .. .. .	1 dr.
Extract of malt .. .. .	4 oz.
Bitter-almond water .. .. .	2 "
Emulsion of cod-liver oil (50 per cent.)	10 "

Dose: One or two tablespoonfuls three times a day, after meals.

This form Dr. Eichlecher has found to be an excellent and pleasant remedy, combining the effects of creosote and cod-liver oil, aiding digestion by means of the malt, and the almond-water exerting a slight sedative influence upon the bronchial mucous membrane. The usual flavour for the above emulsion consists of the oils of orange, bitter almonds, and wintergreen.

### ANILINES IN MEDICINE.

STILLING AND WORTMANN have recently been experimenting with "methyl violet" as a bactericide. It is well known that bacteria and bacilli absorb aniline and are killed by it. Applying this fact to therapeutics, they found that skin-ulcer on a scrofulous child, which had been treated for a month with the ordinary antiseptic agents without success, was gradually healed by daily dropping a little aniline solution on the sore; and similar good results were had with bad cases of eye-disease. It soon appeared that many surgical cases were open to successful treatment in this way; and that, in general, wounds and sores developing suppuration could be sterilised with aniline. It is also thought that

cases of internal inflammation, as in pleuritis and peritonitis, may prove to be not beyond the reach of this order of treatment. The preparations which they have found most effectual were a dusting powder containing 1 in 1,000 of methyl violet or of pyocyanin, and solutions varying in strength from 1 in 1,000 to 1 in 5,000.

### THE USES OF HYDRASTINE.

DR. MCNAUGHTON JONES has been strongly impressed with the usefulness of hydrastine, especially in certain female complaints. He tells the *Medical Press* that he has given tabloids of hydrastine muriate (gr.  $\frac{1}{4}$ ), ergotine (gr.  $\frac{1}{2}$ ), and cannabin tannate (gr.  $\frac{1}{2}$ ), three times a day. Hydrastia and sclerotic acid will be found most useful in hæmoptysis and in epistaxis (in the latter the extract may be used with glycerine and tincture of matico most efficaciously as a local styptic or on a tampon) or in vicarious hæmorrhages of women. In chronic hyperplastic conditions, in the earlier stages of uterine subinvolution, in the "secondary hæmorrhages" that follow abortion, miscarriage, or labour, hydrastis, in combination with other astringents, will be found valuable, both administered internally and applied locally. In those cases of atonic dyspepsia and general debility so commonly met with in women who have suffered from menorrhagia from any cause, especially those who have lived in the tropics, the tincture of hydrastis will be found a valuable adjunct to other remedies, particularly if there be cardiac weakness accompanying the dyspeptic state, or loss of appetite. Dr. M. Jones also speaks highly of "Celerina" and "Aletris Cordial."

### EPISTAXIS.

THE last number of Dr. B. W. Richardson's *Asclepiad* contains an interesting note on the treatment of epistaxis, in the course of which the writer says that the production of a firm coagulum, and the maintenance of a gentle but decisive pressure, are the two objects which are to be aimed at. No plug answers so well as one made of cotton, charged with perchloride of iron. If the cotton be sufficiently moistened to admit of being nicely modelled, it may be made firm and shapeable enough to be passed, like a bougie, along the nasal canal quite into the pharynx, and, formed like a wedge, can easily be made to fill firmly the whole of the canal, as completely as if it were drawn up through the pharynx from behind; and it may, if necessary, be pulled down into the throat through the pharynx, so as to make the wedge the firmer and more secure. After the cavity is thoroughly plugged on the bleeding side, or if necessary on both sides, a gentle pressure may be applied to the nostril with the fingers, until the plug, soon charged with coagulated blood, is firmly set; and, this effected, absolute rest for ten or twelve hours is sufficient to effect a cure; but it is wise not to remove the plug until it can easily be blown out by the patient. In addition to the local treatment, it is always good practice to administer a saline purgative, of which none can be better than the late Dr. Druitt's "Haustus magnesiæ sulphatis acidus":—

Magnesiæ sulphatis .. .. .	3j-iv.
Syrup auranti .. .. .	5ij.
Acid sulphurici dil. .. .. .	℥x-xx
Aquæ .. .. .	3jss.

Misce. Fiat haustus.

This draught may be administered with advantage in a wineglassful of water, twice a day, for a day or two after the hæmorrhage has ceased.

METHYL-SACCHARIN is said to be more powerful as a sweetener than Fahlberg's saccharin. It is methyl benzoic sulphinate, having the formula  $C_6H_5 \cdot CH_2SO_2 \cdot CO \cdot NH$ , and is obtained in colourless crystals of great lustre, which melt at  $246^\circ C$ ; it is sparingly soluble in water, but its solubility increases by the addition of an alkali.

AN ONTARIO CHEMIST (109/34) asks us to note his "appreciation of THE CHEMIST AND DRUGGIST, which," he adds, "I have found of great service. The recipes and general information contained in it I have always found practicable and practical, not ultra-scientific and abstruse, as is the case with one or two other journals which reach me."

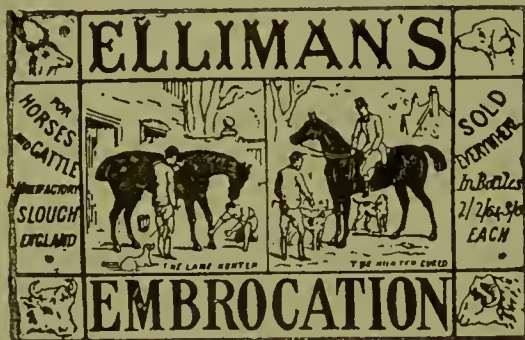


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## EDITORIAL NOTES.

### THE PRESIDENT'S CAMPAIGN.

WE have not yet fathomed exactly the objects of the  
 "starring," or, as it is more irreverently described, the  
 "stumping" tour of the President of the Pharmaceutical  
 Society, which we have had to report during the past few  
 weeks. We do not trace in Mr. Carteighe's speeches any  
 inclination towards a new policy, nor, indeed, would any  
 such tendency be justifiable after the decided expression of  
 opinion in favour of the established order of proceeding  
 recorded at the last election. It is true that we are promised  
 a new Pharmacy Bill for consideration shortly; and the  
 lesson taught by the last experiment, that any attempt at  
 oligarchical legislation is sure to end in ridiculous failure



has evidently been well digested. If needs be, the trade will be quite prepared to repeat it. But it is impossible to expound and defend a scheme which has not yet been formed; and to do the President justice, it must be admitted that he has been particularly cautious not to embarrass himself with any programme for the future as regards either new legislation or the administration of the old Act.

So far as we understand the purport of Mr. Carteighe's historic reminiscences, he would have the trade leave unconditionally to the authorities of Bloomsbury Square the preparation of such things as Pharmacy Bills. He is, we are sure, honestly convinced that it could not be in better hands; and he shows to his own abundant satisfaction that it has been only outside interference which has prevented perfect pharmaceutical legislation in the past. That may be all true—it is not our present purpose to discuss it—but it is not a workable theory. Nobody, except a few divisional secretaries, is likely to surrender his rights of criticism and of opposition to the Pharmaceutical Council to the extent that is suggested. In plainer terms, there is no chance of getting anything like a general support for the Council's new Pharmacy Bill before it is drafted.

Mr. Carteighe knows this very well, and is hardly likely to have undertaken a meaningless enterprise. Nor do we suppose that his primary purpose is to go about answering the rather elementary legal queries with which some earnest but not well-informed inquirers occupy the time of the meetings. In the absence of any well-defined object, we may assume that the aim of the promoters of these assemblies—to give the little meetings a title which their dimensions scarcely justify—is to press home the appeal so often made to the trade to become a united body under the Society's banner. It is very easy to wax enthusiastic about what could be done if chemists would all work together like one man, but it is surely time that the baselessness of the dream that this can ever come to pass should be realised. The evidence of two distinct currents of opinion, with numerous subsidiary eddies, came out very strongly at the last Pharmaceutical Council election. One of these currents flows in the direction of trade interests, the other not exactly in the other direction, but confessedly not directly towards it. Of the existing voters in the Pharmaceutical Society, 1,792 do not desire that their organisation should change its character, and at the outside only 619 may be reckoned to have any desire for a change of government. What is the temptation to chemists and druggists to associate themselves with a body which in such definite fashion refuses to march?

In many of his speeches Mr. Carteighe takes the opportunity of depreciating the "pharmaceutical press." He is fond of suggesting that ignorance, inaccuracy, and unfairness are its characteristics, though he is careful not to define his grounds of complaint. It is not easy to understand the purpose or the prudence of these vague criticisms. A journal which is read weekly by a thousand times as many chemists as constitute some of the President's audiences cannot be without influence; and in the promotion of an enterprise affecting the whole trade—such as a new Pharmacy Bill, for example—it would seem to be the better policy to unite and not to disintegrate the forces of the trade. This is, we have reason to believe, the private opinion of some even of the President's admiring colleagues.

## COMMERCE IN WESTERN CHINA.

In a book entitled "Three Years in Western China," published by George Philip & Son, of 32 Fleet Street, Mr. Alexander Hosie, a British consul in China, recounts the

adventures that befell him, and minutely describes the products and the openings for commerce which he observed, during a three years' sojourn in the heart of Western China. In Mr. Hosie our consular service possesses a man who can not only observe, but is able to communicate the result of his observations in an instructive and entertaining manner, and who possesses the faculty—with which we could wish more of his professional brethren to be endowed—of making something more out of his statistics than bald arrays of numerals.

Mr. Hosie's consular headquarters were at Chung-king, a "city of the first order," high up on the Yang-tse River, and the commercial capital of the province of Ssu-chuan. To form an idea of the situation of this station it is necessary to call to mind the somewhat triangular formation of the Chinese Empire, with one corner, well rounded off, touching the French possessions in the South, another the Russian territory of the Amoor, and the apex dug deep into the region of the Central Asian Khanates. The Yang-tse traverses the southern part of this territory, and Chung-king is some 1,500 miles up the river, about 500 miles north of French Tonquin, and almost an equal distance east of the British Burmah frontier. It possesses a population of about 200,000, has only quite recently been placed among the "treaty ports" open to European commerce, and is destined to become, in the near future, the focus of the rival attempts of French and English traders to secure the largest share of the local requirements of cottons, woollens, and such-like. From this spot Mr. Hosie made several journeys through the province in which he was stationed and the adjoining provinces. The journeys were not altogether devoid of risk: Margary, a young Englishman connected with a mission which had tried to penetrate into Southern China from Burmah a short time previously, was brutally murdered in the attempt; and several other travellers had met with a like fate before. The inconveniences of travelling in this part of China are also considerable, progress is slow, and the habits of the people do not add charm to the journey. To pay his way Mr. Hosie had to carry along a large supply of silver ingots, each of the weight of about 10 taels or Chinese ounces, from which a piece was sliced off and weighed whenever a payment had to be made. The difficulties of this peculiar currency were enhanced by the fact that the value of the tael varied in almost every city on the route. Shortly after his departure from Chung-king Mr. Hosie first saw poppy-fields in full bloom, white and purple being the prevailing colours. Where the flowers had fallen the peasants were busy harvesting the juice—this was in the latter half of April—scraping it off with a short, curved knife from the stems, in which incisions had been made the night before. Poppy-growing is extending rapidly in this quarter of China. Formerly some parts of the country, notably the plain of Chien-chou, were famous for safflower, which was then used as a dye all over China, but has now been superseded by aniline, while the peasants have taken to the opium industry instead.

Mr. Hosie also describes the wood-oil tree, which he found growing through the fields in certain parts of the country, especially on the banks of the Yang-tse, west of Tchang. The tree produces a large green fruit like an apple, the seeds of which are rich in oil. This oil is extracted by means of primitive wooden presses with wedges, and sent to market in wooden tubs with tight-fitting lids. It is used extensively in the manufacture of paint, varnish, and water-proof paper, and also for lighting purposes. The seeds, if eaten, cause nausea and vomiting. From this description it is evident that the tree which Mr. Hosie saw is not that



which furnishes the so-called Indian wood-oil, often seen in this market and used, among other purposes as an adulterant of copaiba, but the *Aleurites triloba*, or candle-nut tree. The fruits of this tree and the oil which is pressed from them, and goes by the name of keknne oil, have been seen in London occasionally, and an outlet, we believe, has been sought for the oil in this market as an illuminant in the place of rape oil, as an oil for artists' colours, and, medicinally, as a substitute for castor oil; but for one reason or another it has not met with commercial success so far.

The same applies to some extent to the Chinese insect-wax, the production of which is described so minutely in the book that it would appear as if the author is seriously of opinion that it may become a commercial article of importance. A few months ago a small consignment of this wax was shown at the London drug auctions, but, as no one appeared to know it, it remained unsold. We believe that something like 7d. per lb. was expected for it by the owners, but we cannot say what became of it ultimately. It much resembled refined spermaceti in appearance and might perhaps have found some use, at a low price, among candle manufacturers if there had been any prospect of a continuation of the supply on a sufficiently large scale. Mr. Hosie was requested in 1883 to investigate the insect-wax industry by the then director of Kew Gardens, and on one of his trips collected very detailed information, of which the following is a synopsis:—The wax insect (*coccus pe-la*) is found in greater or less abundance throughout the majority of the provinces of China, but its breeding-ground *par excellence* is the valley of Chien-chang, between 29° 20' and 27° 11' N., on the upper Yang-tse waters. In that region the so-called insect-tree grows in abundance, and in March and April becomes covered with a mass of pea-shaped, brittle excrescences, the scales of the white-wax insect, a small, brown, six-legged creature provided with two long antennæ. The insect is subject to the attacks of a beetle which feeds upon it, hence the scales infested with beetles are reckoned much less valuable by the Chinese than those that are free from these pests. Towards the end of April each year large numbers of carriers come to the Chien-chang valley from Chia-ting, a town about 200 miles further north-east, which is the centre of the wax business. In former years as many as 10,000 carriers used to call in the valley every season, but since the introduction of petroleum into China the demand for insect-wax candles has been much reduced. Consequently the industry has decayed, and the carriers now number only 1,000. The scales are put up in paper packets of about 1 lb. each, sixty of which form a carrier's load. When the scales arrive at Chia-ting they are hung up in wood-oil tree leaves underneath the branches of a small tree cultivated for the purpose, and much resembling the European pollard willow. The insects crawl out of the packages on the leaves and branches, and there they remain for about one hundred days, the males excreting a substance which forms the white wax of commerce. In favourable seasons the insects yield about four times their weight of wax; in bad years only an equal weight. When the wax formation is complete the product covers the boughs of the tree to a thickness of about  $\frac{1}{2}$  inch. The branches are then lopped off, and as much of the wax as possible removed by hand. This forms the best quality. A second quality is obtained by throwing the boughs in boiling water, and gathering the melted wax as it appears on the surface; and the third, and worst, by placing the insects themselves—which have sunk to the bottom of the pot—in a bag, and squeezing the remaining wax out of them.

Mr. Hosie's book contains much other valuable matter of

commercial and general interest. It is well illustrated, but might have been much improved by the insertion of a few small maps between the text, the large map at the end of the volume being rather unwieldy, and not sufficiently clear to give a thoroughly good idea of the extent of the author's travels.

## SCIENTIFIC WORK FOR CHEMISTS.

### V.—MILK ANALYSIS.

Few departments of the analyst's work have given rise to so much controversy as the analysis of milk, and the most expert are still so far at variance regarding the best methods and the most reasonable standards, that it would seem ridiculous for the comparatively uninitiated to pronounce judgment upon the quality of any sample of milk. As we have before stated, however, the object of this series of articles is not to get chemists and druggists to set themselves up as analytical authorities on an equal platform with professional analysts, although there is no reason why they should not do so if in time they acquire the requisite skill and knowledge; but to foster amongst the general public a better appreciation of the value of analysis in determining the purity of the commodities of common life. We hold that it is possible for chemists and druggists to be of great assistance to the public in this matter. They have a certain amount of preliminary training which constitutes a good basis for further practice, and the use of a little business tact and talk will assist in getting customers to adopt the pharmacy as the channel through which analyses should be obtained. There is a custom now existing in the trade of taking in analytical work and getting it done on commission. This is convenient, no doubt, but we question the wisdom of the custom. It would be far better to do the work at home by simple methods, and if the results show that a sample is on the border-line of purity and impurity, then is the time to seek the opinion of one who has special experience in the subject. This applies with some force in the case of milk. Most of the disputes regarding it have turned on the alleged addition of a small percentage of water—5 per cent. or thereabout. It will be seen from what follows how difficult it is sometimes to assert from analytical data that 5 per cent. or less water has been added; and, if a chemist and druggist were to meet with such a sample, we do not think he would be wise in pronouncing it adulterated.

Cow's milk, under normal conditions, is a liquid of variable composition. It consists of water, fat, casein, sugar, and inorganic salts, but the solids vary according to the time of milking, the food of the cows, and their condition. There are more ways of watering milk than pouring *aqua pura* into it: some kinds of "feed," notably brewers' mash, increase the flow of the lacteal secretion without adding to its richness in the nutritious elements. But, irrespective of this and other circumstances, cow's milk shows an average specific gravity of 1.030, and the total solids vary from 12 per cent. to 14.5 per cent., or even more, 3 per cent. of this consisting of fat, and from .65 to .85 per cent. of inorganic salts. It is customary for analysts to allow a margin in favour of the seller, and in this instance they have fixed 11.5 per cent. as the standard for total solids, 2.5 per cent. for fat, 9 per cent. solids not fat, and 0.7 per cent. for ash. The only instruments required in the analysis which has not been mentioned in previous articles are a hydrometer graduated from 1.000 up to 1.050; and a flat platinum basin capable of holding half an ounce of liquid: this basin should have a lip. The specific gravity of the milk should be taken at 60° F., and the figure found will serve as a good guide for subsequent operations. It should



be noted here that it is best to work with fresh milk, for certain allowances have to be made when decomposition sets in. Note, therefore, at the outset the acidity or otherwise of the sample; it may be alkaline from the addition of bicarbonate of soda in excess, and this or any other addition, such as boric acid—now commonly used as a preservative—may notably affect the percentage of total solids. For analysis, take 100 fluid grains (110 minims) of the milk, and pour into the platinum dish, rinsing out the measure with a little distilled water, which should also be poured into the dish. Now evaporate on a water-bath to dryness, and continue to heat for three hours on the water-bath; then allow to cool, and weigh the dish and its contents. By subtracting the weight of the dish from the total weight the percentage of total solids in grains is obtained. A very fair indication will at once be obtained as to whether the milk has been tampered with or not. The residue in the dish is a tough mass of "casein" and fat, which should now be carefully and completely removed from the dish and reduced to powder in a mortar along with 20 or 30 grains of glass or clean sand. Place the mixture in a small percolator, and having washed the dish and mortar with a little anhydrous ether (methylated), pour this ether on the contents of the percolator, and allow to stand for half an hour, then percolate and continue the process with more ether until the percolate ceases to impart a fat stain to paper. The use of a Soxhlet tube, or other continuous percolator, saves ether, but otherwise is not necessary. Evaporate the ethereal percolate in the platinum dish until the fatty residue ceases to lose weight. The weight of the dish and contents minus the former gives the percentage of fat in grains, and the difference between this and total solids is the percentage of solids not fat. These two factors are generally sufficient for arriving at an opinion as to the quality of the milk. Pure milk, in most cases, gives more than 2.5 per cent. of fat, so that if that percentage at least has been obtained, and if the solids not fat are normal, the sample will pass. But if cream has been abstracted, we should expect to find solids not fat higher than the normal, and fat less; or, if water has been added, the total solids will have been reduced. It is obvious, therefore, that the analysis, so far as we have taken it, will have given the requisite information on these points. But it is desirable to ascertain the amount of ash, and its nature. Generally this is done by taking the residue from the fat extraction: but, as we have mixed silicious matter with it, another 100 fluid grains should be evaporated in the platinum dish, and when solid ignited over a Bunsen burner. The ash which remains should weigh 0.7 grain, and, if more than 0.85 grain, the addition of a preservative, such as boric acid, borax, or sodium carbonate, may be suspected. The normal ash of milk consists of calcium, magnesium, and iron phosphates, and sodium and potassium chlorides, with sodium carbonate, derived from the "casein." Boric acid and borax can be readily detected in the ash if either is present. Salicylic acid must be looked for in the milk itself, the best plan being to place a little of the milk in a dialyser, and floating it on distilled water. In a few minutes sufficient will have passed through to give the violet coloration with a drop of ferric chloride solution.

The methods which we have given here are the simplest and most reliable. Much depends upon the care and skill of the operator, but the manipulation is, on the whole, so simple, and the necessity for more frequent examination of milk so great, that chemists and druggists should make it a regular part of their business. Those who wish to go deeper into the subject cannot do better than consult Wanklyn's "Milk Analysis."

## COMMENTARY.

THE CHELSEA BOTANIC GARDEN, which, according to rumour, Lord Cadogan is willing to buy from the Apothecaries' Society for building purposes, covers rather more than three acres, and is estimated to be worth some 30,000*l*. It costs the Society about 600*l*. a year to maintain. They first leased it in 1673, and in 1721 Sir Hans Sloane, who had bought the freehold from Lord Cheyne, conveyed the property to the Society by deed of gift. Evelyn records his visit, on August 7, 1685, "to see Mr. Wats, Keeper of the Apothecaries Garden of Simples at Chelsea"; he mentions "the tree bearing Jesuits bark" and "the conservatory," probably one of the first hothouses built in England. The Company set up here Rysbrach's marble statue of Sloane in 1733; of the two once magnificent cedar-trees, said to have been planted in 1683, one was blown down thirty-six years ago. One of the conditions of Sir Hans Sloane's gift was that "it should be at all times continued a physic-garden, and that the apprentices might learn to distinguish good and useful plants from hurtful ones." Before they can sell it the Society will have to get an order from the High Court to set the deed aside, and the inhabitants in the neighbourhood are bestirring themselves either to resist such an application or to take over the garden themselves.

CINCHONA IN THE UNITED STATES.—The United States Secretary of Agriculture is concerned to induce the California farmers to grow cinchona. In his report for 1889, according to the *Oil, Paint, and Drug Reporter*, he points out that San Diego in California is just the place for cinchona-growing, and if anyone contemplates venturing upon the industry he should confine his efforts to that locality. In 1864 attempts were made to grow cinchona in California, and also in Florida, but these were unsuccessful. The reason why Mr. Secretary has specially selected San Diego as the land of promise is that the mean yearly temperature in that "section" is 64° F., which corresponds almost exactly with the mean temperature of the cinchona plantations established, according to this same authority, "in the Isle of St. Helena, in rich lands bathed in moisture, at an elevation of 1,500 feet above the sea-level." Who shall say that the United States Department of Agriculture is not an institution of practical value after this astonishing discovery? Here is a new source of supply—plantations in St. Helena, of which nobody has ever heard before, and which, Mr. Secretary thinks, should be taken as the model of what a successful plantation ought to be! "It has been reported that the cinchona plantations at St. Helena have been abandoned, but I have not seen any statement giving reasons for this action," concludes the secretary, apparently brushing aside that report as entirely untrustworthy and unreasonable.

WEST AFRICAN ANNATTO.—Annatto seeds have recently been grown in Lagos, on the West Coast of Africa, and the Governor of that colony sent over a sample, the produce of fourteen trees, to the Colonial Office in London, for information whether it would be worth while to encourage the propagation of the annatto industry in Lagos. The Colonial Office handed over the sample to the Kew authorities, and they, in turn, communicated with several firms of annatto importers and manufacturers. The whole transaction is recorded in this month's *Kew Bulletin*, and we are glad to learn that the Lagos people are not likely to derive from the correspondence any particular encouragement to embark largely upon this industry. The sample of Lagos annatto sent by the Governor was much inferior to the best qualities



with which our market is kept fully supplied by Jamaica and Ceylon. Experts valued them at only 1½d. to 2d. per lb., which, after deducting the freight and allowing about ¼d. to ¾d. per lb. for London charges and sale expenses, will scarcely leave a sufficient margin for profit. It is true that the Lagos seeds had the appearance of being gathered before they were fully matured, and having been packed in a moist condition; but even the best Jamaica seed is not now worth more than about 3d. per lb., and there appears to be no prospect of an early advance in the prices. Messrs. Fullwood & Bland, the annatto manufacturers, very pertinently observe in their letter to the Director of the Kew Gardens, that "the Ceylon people made a great mistake in 1888 in sending *one* consignment of 150 barrels; the consequence of so large a quantity being thrown on the market was that the whole shipment was sold for less than cost of freight, dock charges, &c." The same would, in all probability, occur again if a new market were to add its produce to that which we receive from the present sources. It is true that it might pay the Lagos people better to manufacture the colouring matter of their seeds into flags or rolls, as is done by the Brazilian and Guadeloupe shippers; but, even in that case, it is doubtful whether the market would not soon be over-supplied, as the outlet for the dye is a comparatively limited one.

**A PROFITABLE ANNATTO SPECULATION.**—As a matter of fact, annatto is only one of numerous articles of which the over-supply is so great that there is no profit in handling them for either cultivator, shipper, importer, or broker, and, we might add, wholesale dealer. It was different about thirty years ago, as the following story will show. In 1863, or thereabouts, there was a considerable stock of Brazilian annatto in the hands of several importers in Liverpool. The market had been flat for a long time, and the owners were anxious to get rid of their stock. They therefore approached the head of a German firm of drug merchants in London who had extensive connections in Russia, where the greater part of the roll annatto is consumed. That gentleman thought there was room for a profitable transaction, and accordingly took the first train to Liverpool, where he told the holders that he was willing to buy provided they all agreed to sell all they had. The proposal was accepted, and the merchant returned to London the happy possessor of about ten tons of annatto, which cost him, on an average, about 3d. per lb. Upon his return he stated to his Russian friends that annatto was sure to rise considerably in value shortly—a fact pretty patent to himself, as he was the only owner, and, in those days of limited steam communication, the future supplies of almost every article could be fairly accurately gauged for several months ahead. The Russians tried to buy everywhere, but failed to secure any supplies except from the one holder, who, within a few weeks, cleared the whole stock at prices ranging from 10d. to 1s. 3d. per lb., and netted over 700% by the transaction.

#### HYDROCYANIC ACID.

By B. S. PROCTOR, F.I.C.

SEVERAL instances have recently occurred to me of hydrocyanic acid, from makers of high repute, being at variance with its label. A sample received about the end of last year, labelled as Scheele's, tested only as B.P. Another sample (in stoppered corbyn), ordered and invoiced as Scheele's, was labelled B.P., and had the official strength. A third corbyn, from a different source, in the early part of this year, was labelled Scheele's Hydrocyanic Acid, 5 per cent., but analysis gave its strength as only 4 per cent.

The explanations given were plausible, and in some measure satisfactory; but the facts still show the necessity

of a constant watch upon the strength of this potent agent. The retail pharmacist may put too great reliance upon the care and accuracy of firms whose ability and morality are beyond question; and the said firms may put too great reliance upon the care and attention of their warehousemen and others. Temptation to supply an inferior article is out of the question, both on account of the character of the firms supplying and from the cheapness of the material; but medicinal value, a point greatly more important both to the pharmacist and his patient, stands none the less in need of vigilance. The accounting for the acid which was invoiced as Scheele's, and labelled as B.P. was a simple mixing of goods by the packer—my acid had gone to someone else, and someone else's acid had come to me; but the looking after and testing the strength was no less important in its results, and should be regarded as one of the grounds upon which the pharmacist is justified in charging for his responsibilities, and should help to mark the difference between the chemist's goods and those from the stores.

The latter example, where the acid was labelled "Scheele's 5 per cent.," and tested only 4 per cent., was supposed to arise from the maker continuing the old custom of making Scheele's acid of 5 per cent., and storing it in carboys, which were all known to be 5-per-cent. strength when filled; but it was conjectured that I had received the "bottom of the carboy," which might have lost strength, though of only a few weeks' keeping. Many suggestions have been made from time to time regarding the preservation of this acid, and have probably been disregarded from their imperfectly covering general and reasonable requirements. The keeping of the acid in one-ounce vials, or even, as some have said, in two-drachm vials, could only come from those who, having a limited experience, recommended for general adoption what was suited to their own circumstances. I have been accustomed to think that safety lay rather in suiting the size of the vessel to the consumption, so that the bottle dispensed from should be replenished every few weeks, and that the store kept in the cellar should be such as to last eight or ten weeks, which, with the coolness, darkness, and infrequency of opening, has usually been found to keep it in good condition. The experience of a 5-per-cent. acid being 4 per cent. at the bottom of the carboy after a few weeks' keeping suggests a further rule—that of always rejecting the bottoms of the bottles. It is reasonable to suppose that a proportionately large air-space over a small quantity of liquor favours deterioration, whether it be in a vial or a carboy.

Formerly "Scheele's acid," or "acid by Scheele's process," were the expressions in common use; more recently "Scheele's strength" has come to be the common expression. And, though the old process was stated to yield an acid of 4 to 5 per cent., the name has been retained as if it indicated a particular strength. The attempt to give a semi-official definition by the B.P.C. recommendation that "Scheele's acid" should be understood to imply 4 per cent. has not as yet been so effectual as it deserved to be; but the proposal to define it officially in an addendum to the B.P. will no doubt be acknowledged by manufacturers who do not acknowledge the authority of a voluntary association. The pharmacist of fifty years ago would have been regarded as unreasonably critical if he did not accept the assurance of the wholesale druggist that the prussic acid was by one of the best makers—a sort of guarantee at second hand which could afford him no protection under the Food and Drugs Act. The pharmacist of the present day may keep his conscience quiet by buying it with a guarantee that it is of correct strength as he receives it. But the pharmacist of the future will have to be assured that the acid, as he sends it out, either by retail or in dispensing, is within practical limits of the defined strength, and that his act of supplying it is equivalent to his guarantee that it is so.

How long will manufacturers feel satisfied that they have done all that can be reasonably expected of them when they have tested their acid at the time of its manufacture? Till the purchasers habitually test, and protest when there is any irregularity.

With the manufacturer the "bottoms," when such occur, should go in with the next batch upon assay. With the dispenser, the bottoms are too small to be worth an assay. Let him consider, then, that they are also too small to be grudged throwing out.



## BRITISH AND FOREIGN CONSULS' REPORTS.

## ITALY.

*Pharmacy in Sardinia.* According to the French Consul at Cagliari, the capital of Sardinia, the pharmacists in that island have little to complain of, so far as business is concerned. The rural inhabitants (whose life is spent in swampy marsh-lands), instead of taking simple sulphate of quinine, spend considerable amounts of money in taking excessive quantities of compound medicines, and such a phenomenon as a pharmacist who fails to do a good business has never been known in Cagliari. Many French drugs are used in the island, and this branch of trade is capable of much further development.

*Perfumery in Sardinia.* French perfumery and toilet-articles play a very subordinate part indeed in the consumption of the island. Most of the articles under this head are furnished by firms in Turin and Milan, or by German manufacturers, who furnish very carelessly got-up articles, at a price which must leave a good profit. A few English articles (Rimmel's, &c.), are occasionally met with, but of French labels, Pinaud, Piver and Mousson (?) are the only ones which one sees at intervals.

*Chemicals.* Acids and chemicals, used for the extermination or prevention of phylloxera—such as sulphate of copper—are purchased in large quantities. Pigments for house-paintings are also in demand, as well as a few products for leather dressing and dyeing, of which branches of industry the city of Cagliari is an important centre; but these goods are mostly furnished by other parts of the island, where the principal raw materials are found in abundance.

*Olive Oil.* Leghorn is the focus of the Tuscan olive-oil trade, and the olive oil of Tuscany still maintains high reputation as a pure oil for table use. But a considerable falling-off is to be noticed in the export of this as well of most of the agricultural products of Italy.

In 1882 and 1883 the olive oil exported from Leghorn amounted to 4,813 tons and 4,132 tons respectively, whereas in 1887 the total export had fallen to 3,811 tons, and in 1888 to 2,109 tons. The proportion of the whole export which goes to the United Kingdom shows, however, a slight increase.

The trade to the United Kingdom in Tuscan olive oil is almost wholly in the hands of one large English firm long established in Leghorn, and four-fifths of the oil sent to Great Britain is sent direct to London in their own steamers. The best quality of Tuscan olive oil, known in the trade as "Lucca oil," is shipped in casks, not in flasks, to one or two of the leading Italian warehousemen in London, and it is there bottled, labelled, and distributed to the public.

The deception, to which attention has been more than once called of sending empty "Florence flasks" to the United Kingdom, there to be filled with any adulterated compound, or with cotton-seed oil pure and simple, still continues, but in a diminishing degree, so that it may be concluded that the public is getting alive to the imposition in that manner practised.

## NORWAY.

*Cod-liver Oil.* The total exports of cod-liver oil have been:—

	1884	1885	1886	1887	1888
Tons ..	12,500	14,700	16,900	16,000	20,200
Value ..	£317,030	290,000	235,000	256,000	312,000

## RUSSIA.

*The Petroleum Trade.* The exports of petroleum products from Batoum, the port through which the output of the Baku petroleum-wells is brought into commerce, has grown to 649,085 tons (value 3,023,300*l.*) in 1889, from 450,326 tons (value 1,724,446*l.*) in 1888. All her branches of business, especially those relating to ports, occupy a very subordinate rank in the local market. On the other hand, the import of such foreign goods as are absolutely required for the petroleum-trade—as, for instance, plates, caustic soda, &c.—has become a business of considerable importance. If it were not for the demand for such articles, there would be scarcely any cargoes for ships

arriving in Batoum to load petroleum. The imports of caustic soda are about 4,000 tons per annum. Although the aggregate quantity and value of the petroleum-trade considerably surpassed that of any preceding year, the business, so far as profitability goes, was upon the whole less satisfactory. Such firms trading in petroleum who, at the same time, are owners of productive petroleum-wells, must have found the year an exceptionally profitable one, because of the great rise in the price for crude oil. But the commercial community as a body have not been able to realise profits in any way proportional to the expansion of business.

*Liquorice Root.*

The trade in liquorice root in the Caucasus, though still in a state of infancy, is growing apace, and seems to promise to become a lucrative business in the course of time.

*British Goods.*

No improvement can be noted in the sale of British goods in South-Western Russia. English goods of any description are now seldom seen in this part of Russia; but, in consequence of the continued inferiority of Russian-made goods and the favourable exchange, it is anticipated that a change will take place shortly, and a demand again spring up for several descriptions of English goods.

## SPAIN.

*Quicksilver.* The shipments of quicksilver (all of which goes to England) from Corunna, in 1889, show a large increase over the previous year, the value being returned as respectively 5,864*l.* and 11,600*l.* This quicksilver is produced by the Asturian mines in the North of Spain. These are much less important than the Almaden mines in the South; but, as the Asturian mines are being exploited much more extensively now, the quantity they produce is likely to be larger in future.

*A Tale of a Pill.*

The United States Consul at Cadiz is responsible for the following: "The people here have great faith in the superiority of American goods. When I first came to Cadiz, a peasant woman travelled a distance of 14 miles, reaching the consulate after it had closed. She stayed all night, visited the consulate in the morning, and asked for a box of American pills. After being assured she was not in a drug-store, she explained that her physician had told her to go to the American consul, and she would not be given adulterated pills that were sold as the American product. She left the office greatly disappointed because we had no pills on sale. In about an hour she returned, and exhibited a box of pills prepared by a New York firm. She had bought them of a druggist who carries quite a stock of American patent medicines. After being assured they were genuine, she went away satisfied. This is but one instance of many that might be related illustrating a preference for American goods."

*Drugs for Barcelona.*

The total weight of manufactured goods imported by sea into Barcelona in 1889 was 52,742 tons, against 51,862 tons in 1888. There was an increase in the importation, among other goods, of colouring extracts, chemical and pharmaceutical products, soap, and indiarubber goods. About 17,790 tons, or one-third of total amount, came from Great Britain, and consisted, to a great extent, of drugs and chemicals. The imports by land included 10,361 tons of drugs, chemicals, and colours.

*Sulphate of Copper.*

Great attention has been given to the question of the use of sulphate of copper in vine disease in the autumn of 1889, and a committee of investigation arrived at the conclusion that the poor results shown for the use of sulphate of copper had been owing to the inferior character of the article that had been employed. It was resolved that the committee should import a quantity of pure sulphate of copper, and supply it to municipalities in the province at cost price, import duty being remitted by the Government. The total amount asked for by the entire province, however, was only 45 tons, and a contract was made for the supply of this quantity to the committee by Messrs. Vivian and Sons, of Swansea. It is thought that other municipalities will avail themselves of this system of obtaining pure sulphate of copper at a low rate as soon as its advantages come to be known.



## Trade Report.

*Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.*

*It should also be recollected that for many articles the range of quality is very wide.*

42 CANNON STREET, E.C., July 17.

THE drug and chemical markets, with the exception of a few departments, still retain their quiet aspect, but there are some signs that prices may not improbably advance in certain directions. Not the least important indication of coming improvement is the passage of the Silver Bill in the United States, which was approved by the President on Monday, and enters into operation on August 13, and the consequent increase in the value of the metal and the exchanges of the countries where the silver standard prevails. The Bombay exchange, for instance, has risen from 1s. 6 $\frac{11}{16}$ d. on Monday to 1s. 7 $\frac{1}{4}$ d. to-day; Calcutta from 1s. 6 $\frac{11}{16}$ d. to 1s. 7 $\frac{1}{4}$ d. to 1s. 7 $\frac{5}{16}$ d.; and Shanghai from 4s. 10d. to 4s. 11 $\frac{3}{4}$ d. This advance ought to be followed by a corresponding rise in the value of the produce of these markets. In our chemical market the principal alterations may be expressed in a few words. Refined camphor is rather dearer in price, and the demand for citric and tartaric acids also shows some signs of improvement. Cream of tartar remains very dull. Quinine is quiet, but slightly stronger. Permanganate of potash still declining. Mercurials firm consequent upon the improvement in quicksilver. In drugs we have to report higher prices for cannabis indica, Mexican and Honduras sarsaparilla, raw camphor, jalap, Guinea grains, cod-liver oil, HGH peppermint, and Italian essential oils. Glycerine also shows a slight improvement. Cinchona was steady at the auctions so far as good barks are concerned, and slightly easier for low grades. Copaiba and Canada balsams are falling in price. Cascara sagrada and insect-flowers are offering very cheaply indeed. Angostura tonquin beans, senega and serpentaria are also tending lower. The crop of digitalis abroad, and of belladonna and hyoseyamus leaves in England has been good, and prices are falling. Gum tragacanth, Japan wax, scammony root and resin, cumin and coriander seeds are also lower. Opium quiet, but very firm. In the articles allied to the drug trade we may point out that common olive oils, coconut oil, and palm oil are firmer. Castor oil is very steady; sticklac, Japan antimony, indigo, turpentine, black and white pepper are dearer; gambier and cutch very firm. Shellac is unsettled and falling; linsced oil, sulphate of copper, chillies, cloves, and ginger also lower. At to-day's auctions Ghatti and Mogadore gum arabics were lower; Kurachee gums full up. Olibanum was also easier. Many heavy chemicals are higher, notably bleaching-powder, caustic soda, soda ash, crystals, sulphate and hyposulphite, and chlorate of potash.

**ACIDS.**—Citric is rather firmer, and holders are now inclined to ask 1s. 3 $\frac{1}{4}$ d. per lb. Tartaric is somewhat better demand, and we hear of sales of foreign makes at 1s. 1 $\frac{1}{2}$ d. to 1s. 2d. per lb. English is quoted at 1s. 2 $\frac{1}{2}$ d. to 1s. 3d. Oxalic steady at 3 $\frac{3}{4}$ d. to 3 $\frac{1}{2}$ d.

**BALSAMS.**—Canada is again reported cheaper from New York. Quotations are at present exceedingly low; good quality at 1s. to 1s. 1d. c.i.f. terms. Copaiba: The arrivals in New York remain very heavy; during the months of May and June they amounted to about 20 tons, but the demand from the trade remains good, and nearly everything is disposed of as it arrives. The prices now quoted are, for Maranhão 2s. 4d., and Pará from 2s. 3d. up to 2s. 5d. For Peruvian balsam, which is offering very sparingly, prices are still hardening, and the demand remains active, the quotations being from 4s. to 4s. 1 $\frac{1}{2}$ d., c.i.f. terms, while in London as much as 4s. 9d. per lb. is asked. Tolu balsam also in demand, and somewhat dearer, at 1s. 3d. to 1s. 4d., c.i.f.

**BROMINE.**—The price remains unaltered at 1s. 9d. to 1s. 10d. Our report of last week announcing an advance in the price of some manufacturers' bromides was in so far incorrect that the combination price still remains unchanged, and bromide of potassium is obtainable according to quantity at 1s. 5 $\frac{1}{2}$ d. to 1s. 6 $\frac{1}{2}$ d. as before. Our report had its origin in the fact that a German firm which for a long time are stated to have been able to purchase somewhat under convention prices are thought to be unable to do so any longer, and have therefore been compelled to raise their quotations; but they stand alone.

**CALABAR BEANS.**—The market is quiet and tending easier. We understand that sales have been made in Liverpool at 6d. per lb., but here the holders ask 8 $\frac{1}{2}$ d., and say that their last sales have been at 8 $\frac{1}{4}$ d.

**CAMPHOR (CRUDE).**—The market is decidedly firmer, and sales of about 3 tons Japan camphor were reported early in the week at 160s. per cwt. on the spot, while nothing further was then obtainable below 165s. per cwt. Since then, however, another transaction has taken place at 160s., and it is said that for one or two small parcels 165s. per cwt. has been paid. There is no reliable c.i.f. quotation at present in the absence of business.

**CAMPHOR (REFINED).**—The market is rather better. The manufacturers' quotations remain unchanged. Sales of German bells were reported yesterday at 1s. 7d. per lb. net; there are further buyers at that price, but it is not thought that anything is available under 1s. 7 $\frac{1}{2}$ d. per lb.

**CANNABIS INDICA.**—Prices are advancing, sales having been made of good greenish tops at 6d. per lb.; but for the small stock now remaining 7d. is asked.

**CARAWAY SEED.**—It is said that the new crop has suffered considerably by the rains which have prevailed all over Central Europe, and that so far as colour is concerned, the new seed is likely to be very deficient. There has been a better inquiry for old seed at 19s. 6d. to 20s., and it is thought possible that as the season advances old seed may be held for much higher prices than the new crop.

**CASCARA SAGRADA.**—It is said that a sale of 10,000 lbs. has recently been made at 30s., c.i.f. terms, for the new bark, but we have not been able to confirm this statement. There is a strong effort on the part of the people who control the bark on the Pacific Coast to keep up the price, as they say that the offers now being made are not sufficient to pay for the harvesting. In the meantime the old-crop bark remains very neglected. Good quality is now offering at 35s. per cwt., London terms; while new is said to have sold at 32s. c.i.f., shipment by sailer from San Francisco.

**CHAMOMILES.**—The new Belgian crop will now shortly be due, and samples are expected in a few days. No reliable news as to the output is yet to hand, but in the meantime fine pale flowers are offering at 75s. per cwt., for delivery the first week in August.

**CINCHONA.**—The periodical auctions which took place on Tuesday offered a very moderate quantity of barks, the catalogues being composed of:—

	Packages		Packages
Ceylon bark .. ..	1,193	of which	1,012 were sold
East Indian bark ..	213	"	185 "
Java bark .. ..	6	"	— "
South American bark	447	"	73 "
Total .. ..	1,859	"	1,270 "

The assortment of barks was a very poor one, and the better class of manufacturing bark was conspicuous by its scarcity. Ledger barks were practically unrepresented, and of good Officialis cinchona there were only a few parcels of any importance. On the other hand, there was a very large quantity of common woody Succirubra, especially in the catalogues which opened the sale, and at first there was every appearance of a drop in the price. As the sale proceeded matters improved somewhat, but competition was never very brisk, and we should say that, on the whole, ordinary barks were rather easier, while for better qualities the last sale prices were about maintained. The unit ranges from 1 $\frac{1}{2}$ d. to 1 $\frac{1}{2}$ d. per lb.; occasionally it just exceeded the latter figure.



The following are the approximate quantities purchased by the principal buyers:—

Agents for the American and Italian works .. ..	Lbs.	60,008
" Brunswick factory .. ..	..	20,817
" Mannheim and Amsterdam works .. ..	..	3,600
" Frankfort o/M. and Stuttgart works .. ..	..	25,708
Mr. Thomas Whiffen .. ..	..	52,480
Agents for the Auerbach factory .. ..	..	48,636
Messrs. Howards & Sons .. ..	..	27,355
Agents for the Pelletier factory .. ..	..	15,926
Sundry druggists, &c. .. ..	..	10,684
Total quantity sold .. ..	..	345,313
Bought in or withdrawn .. ..	..	95,117
Total weight of bark offered .. ..	..	440,430

It should be well understood that the mere weight of bark purchased affords no guide whatever to the quinine yield represented by it, firms who buy a small quantity of bark by weight frequently taking the richest lots, and *vice versa*. An analysis of the catalogues gives the following prices for sound bark:—

**CEYLON BARK.**—*Original.*—Red varieties: Ordinary dull and woody to fair quilly chips,  $1\frac{3}{4}d.$  to  $2\frac{1}{2}d.$ ; good strong bright chips,  $3d.$  to  $3\frac{3}{4}d.$ ; ordinary dark and dusty to fair shavings,  $1\frac{1}{2}d.$  to  $2d.$ ; good to fine bold bright,  $2\frac{1}{2}d.$  up to  $5d.$ ; thin quillings,  $1\frac{1}{4}d.$  to  $1\frac{3}{4}d.$ ; a large quantity of dark, and mostly very dusty, root, from  $1\frac{3}{4}d.$  to  $3d.$  per lb. Grey varieties: Ordinary dull and woody to fair chips,  $2d.$  to  $3\frac{1}{4}d.$ ; good strong quilly, but dark,  $4d.$  to  $5d.$ ; bold mixed, but dark, root,  $5\frac{1}{2}d.$  to  $6d.$  per lb.; very low dusty yellow shavings,  $1\frac{1}{4}d.$  per lb.; fair hybrid shavings,  $2d.$  to  $2\frac{1}{2}d.$ ; and common dusty root,  $1\frac{1}{2}d.$  per lb. *Renewed.*—Red varieties: Rather dark and woody stem chips,  $2\frac{3}{4}d.$  to  $3d.$ ; fair bright ditto,  $3\frac{1}{2}d.$  to  $4d.$ ; common siftings,  $1\frac{3}{4}d.$ ; good bright, but dusty, shavings, mixed with branch quill,  $5d.$  to  $5\frac{1}{2}d.$ ; fine strong shavings,  $7\frac{1}{2}d.$  to  $8d.$  per lb. Grey varieties: Ordinary dull woody and dusty chips,  $3\frac{1}{2}d.$  to  $4\frac{1}{2}d.$ ; good strong bright ditto,  $8d.$ ; very small and dusty but good shavings,  $5d.$  to  $7d.$  per lb. Fair bright yellow chips,  $8d.$  to  $8\frac{1}{2}d.$  per lb. Hybrid chips,  $4d.$  to  $4\frac{1}{4}d.$  per lb.

**EAST INDIAN BARK.**—*Original.*—Red varieties: Small weak to fair quilly chips,  $2d.$  to  $2\frac{1}{2}d.$ ; fair spoke-shavings,  $2d.$ ; dull to fair bright root,  $2d.$  to  $3d.$ . Grey varieties: Fair quilly mixed shavings,  $2\frac{1}{2}d.$  to  $3d.$ ; good bright ditto,  $4d.$  to  $5d.$  per lb. *Renewed.*—Dark but bold red chips,  $3\frac{1}{2}d.$  to  $4\frac{1}{2}d.$ ; very small bright shavings,  $4\frac{1}{4}d.$  per lb.; fair to good strong quilly grey shavings,  $6\frac{1}{2}d.$  to  $9d.$  per lb. Low yellow shavings,  $2d.$  per lb.

**SOUTH AMERICAN BARK.**—A small parcel of flat cultivated *Calisaya*, damp and damaged, sold for  $10\frac{1}{4}d.$  per lb. Of a large quantity of cultivated quill *Calisaya*, 5,699 lbs. sold at  $5d.$  to  $10d.$  per lb. for rough broken and damaged to good stout silvery quill. 40,420 lbs. of the same variety were bought in. A small parcel of *Cuprea* is held for  $4d.$  per lb. Six packages common *Red* bark (672 lbs.) from Guayaquil were all bought in. An offer of  $9d.$  per lb. was refused for low colourless quill; and for some flat bark and split quill, dull colour,  $4s.$  per lb. is required.

At the Amsterdam auctions last week the total quantity of bark offered consisted of 52,176 kilos. pharmaceutical barks, and about 270,244 kilos. manufacturing barks, the latter containing a total of 10,927 kilos. quinine sulphate, or an average of 4.05 per cent. The manufacturing barks sold realised an average unit of  $8\frac{1}{2}c.$  per half kilo, and 970 packages were bought in, being held at a unit price of  $8\frac{1}{2}c.$ , which was not obtainable. After the sales a considerable part of this also changed hands. Of pharmaceutical barks the assortment was small, and it sold at very irregular prices. A few lots of Government-grown *Succirubra* in heavy but broken red quill brought very high rates. The next Amsterdam sale is to be held on August 28.

**COPPER (SULPHATE)** is offering freely at casier prices: 18*l.* 15*s.* is quoted for good quality on spot, and for future delivery for September until March the article is offering at 18*l.* to 19*l.*

**CORIANDER SEED.**—The new crop is just beginning to come in in very large quantities, and prices are consequently tending lower, the quality, moreover, being an exceptionally fine one; 11*s.* 6*d.* to 12*s.* is the nearest quotation.

**CREAM OF TARTAR.**—Quiet and dull at 100*s.* per cwt. for best white French crystals, and 103*s.* for powder.

**CUMIN SEED.**—The new crop is now arriving, and prices remain exceedingly moderate: new *Malta* seed at from 23*s.* to 24*s.* per cwt.

**EXTRACTS.**—*English Hyoscyamus* and *Belladonna* leaves have both given a good crop, and prices of the extracts are consequently lower.

**GLYCERINE.**—Rather steadier, and some of the makers have advanced prices slightly; second-hand holders still offer good double distilled 1-260 at 60*s.*

**GUINEA GRAINS.**—Very scarce, and 50*s.* wanted for the small lot available.

**GUM ARABIC.**—At to-day's auctions 30,96 packages were offered, fully two-thirds of which consisted of Bombay gums. The demand was not very brisk, but as in many cases holders showed an inclination to meet the market, a fair proportion was disposed of. *White Mogadore* gum was offered without reserve, and sold at much lower rates. Of this gum the supply is unusually large at present. A small quantity of very superior *Cape* gum sold at fancy prices. Of *Ghatti* comparatively little was sold, and the prices paid were rather irregular, though on the whole somewhat easier. *Kurachee Amrad* brought very full prices, and occasionally sold rather above valuation. The following were the prices paid: *Cape*, very fine white, 14*l.* 2*s.* 6*d.*; fair, rather ambery mixed to good pale sorts, 62*s.* 6*d.* to 92*s.* 6*d.*; red and dusty sorts 60*s.*, dusty to very good pale siftings 31*s.* to 40*s.*, fair glassy brown to very common dark block from 25*s.* down to 5*s.* per cwt. *Australian*: fair frosted reddish drop, mixed with dust, 37*s.* 6*d.*; ordinary dark and woody mixed, 26*s.* 6*d.* to 31*s.* 6*d.*; good blocky, 23*s.* to 24*s.* per cwt. *African West Coast*: Good bold reddish and dark drop, 25*s.* *White Mogadore*: Good pale and ambery drop, 5*l.* 5*s.*; fair white and amber mixed frosty drop and dust, 62*s.* 6*d.* to 75*s.*; red drop, 35*s.* *Aden sorts*: Good to fine bold palish, but scented, 35*s.* to 48*s.*; ordinary to very dark and common, 32*s.* 6*d.* to 15*s.* per cwt. *Kurachee Amrad*: Fine to superior pale, 64*s.* to 5*l.*; fair amber to good pale mixed, 40*s.* to 56*s.*; ordinary dull to good bold pale siftings, 18*s.* to 42*s.* 6*d.*; dust, 16*s.* to 30*s.*; pickings, 23*s.* to 31*s.* per cwt. *Ghatti*: Good to very fine pale, 52*s.* to 60*s.* 6*d.*; fair brownish to good palish clean, 25*s.* 6*d.* to 47*s.*; ordinary darkish, 20*s.* 6*d.* to 22*s.* 6*d.*; siftings, 11*s.* to 20*s.*; pickings, 10*s.* to 14*s.* 6*d.* per cwt. In Liverpool *Brazilian* gum arabic has been in good request, with sales up to 24*s.* per cwt. *Niger* gum has also sold at full rates.

**GUM TRAGACANTH.**—At the auctions on Friday last several thousand packages were opened, and met an exceedingly slow demand. In order to effect sales holders had to accept a reduction of from 4*s.* to 10*s.*, according to quality. *Syrian* sold up to 9*l.* for seconds, 5*l.* 10*s.* to 7*l.* 10*s.* for thirds, and from 35*s.* to 75*s.* for very common to fair qualities.

**INDIGO.**—At the periodical auctions held this week the large quantity of 7,900 chests was declared for sale, but over 1,400 chests were withdrawn prior to the commencement of the auctions. The market was very firm, and altogether 4,100 chests sold at an advance of  $2d.$  to  $3d.$  per lb. for good *Kurpah*, ordinary grades being firmly held; *Oudes* were  $2d.$  to  $3d.$  dearer; good *Bengal* full up to  $2d.$  dearer, and *Madras* slightly easier. At the Central American sales on July 23 it is expected that over 1,000 serons will be offered.

**INSECT FLOWERS** remain cheap, but the season is now almost past.

**JABORANDI LEAVES.**—The small parcel which sold cheaply at the last auctions has since changed hands at a considerable advance. The large supplies which were said to be expected in Hamburg are now reported as non-existent. In Liverpool a fair quantity was to be offered for sale yesterday: the quality was common brown and very stalky, and the leaves were valued at  $8d.$  per lb., much beyond the ideas of the buyers here.

**JALAP.**—Dearer and quoted at 1*s.* 4*d.* per lb. on the spot for good *Vera Cruz*. From New York the quotation comes 1*s.* 3*d.* c.i.f.; it is said that about 150 bales still remain unsold there of the new crop, but they are small packages, and held by very firm holders.

**MEDICINAL HERBS.**—A great many of the vegetable drugs usually gathered on the Continent at the present season



have suffered greatly from the cold and rainy weather prevailing in Central Europe. *Elder flowers* and *poppies* especially are damaged, the latter being very scarce and advancing in price. The new crop of *digitalis* has arrived on the markets; its quality is unusually fine and the price low. *Chamomiles* are plentiful in all parts of the Continent, and the ordinary *flores chamom. vulg.* (not, however, suitable for pharmaceutical purposes) are being offered in Germany at as low a price as 21s. 6d. per cwt.

**MUSK.**—Sales are reported of several caddies; first-pile *Tonquin* at fully the last sale prices.

**OIL (CASTOR).**—All varieties are firmly held at our last quotations. In Liverpool good *Calcutta* seconds are selling at 4½d. per lb. on the spot. From Calcutta it is reported, under date of June 24, that seed is again becoming much scarcer, and the decline has consequently been checked. Stock and production remain small, the rainy weather retarding the output. In spite of the decline reported from Liverpool and London, the Calcutta market continues to advance rapidly.

**OIL (COCOANUT).**—The market shows a considerable advance since our last report, and *Ceylon* oil has sold on the spot at 28s. 6d. to 28s. 9d., but to-day there are sellers at the lower quotation. For steamer shipment from 27s. to 27s. 6d. c.i.f. is asked. *Cochin* oil is quoted at 33s. to 33s. 6d. per cwt. for good to fine quality on the spot. *Mauritius* nominal.

**OIL (COD-LIVER).**—Firm, and the quotation for Bergen is 58s. c.i.f. terms, for best non-congealing oil. Hamburg oil has sold for 55s. in London.

**OILS (ESSENTIAL).**—*Star-anise* oil held very firmly at 6s. 4d. to 6s. 5d. per lb. *Cassia* steady, but unchanged. In American *Peppermint* oil a good business is reported, with sales up to 11s. 3d.—some holders say 11s. 6d.—per lb. for H. G. H. Prices in America are higher than here. As regards English essential oils, it is thought that the Mitcham crop of *Lavender* will be a good one. The *Peppermint* plant stands well in some districts, but very poor in many others. Italian essential oils are still rising, and *Bergamot* especially is firmly held and in good demand. The prices range from 12s. to 14s. 6d., f.o.b., *Lemon* being from 4s. to 4s. 6d., f.o.b. The new *Otto of rose* is being sold locally in some districts of Bulgaria at the same prices as last year, but the largest distillers are said to be unwilling to sell at those rates. The prices of the Constantinople firms have not yet been fixed. *Sandalwood* oil unaltered. Oil of *Cloves* is quoted at 3s. 9d. for first and 3s. 6d. per lb. for second quality English.

**OIL (OLIVE).**—Common oils are stationary, but with a tendency towards hardening prices. *Spanish* oil is held for 39s. to 40s.; *Messina* at 39s.; *Syrian* at 38s.; and *Mogadore* at 34s. per cwt. There is not much business passing at present. With regard to eating oils, prices remain the same. So far as the coming crop is concerned, we hear that Nice is likely to give only half of a good crop, but the quality is fine. From Tuscany, damage to the growing crop is reported. Nothing is yet known about the Bari crop.

**OPIUM.**—The new *Salonica* opium which has so far arrived in London shows a very fine quality. Nothing is yet to hand from Asia Minor. Our market is firm, but without business of any importance. From Smyrna cables came during the week, saying that the market had dropped from 13s. 1d. to 12s. 3d. per lb., c.i.f. terms, for fair seconds, but since then it is further reported to have gained in firmness. The *Oil, Paint, and Drug Reporter* of the 1st inst. says that the improvement on the American market continues. "One fact," it adds, "that seems to have given particular strength to the position is the virtual withdrawal of the American adulterated stock from the market. The Greek who came here from Smyrna about six months ago for the purpose of introducing the art of adulterating opium is reported to have sailed for Havre. His goods had been sold through a local commission house, but in view of the increasing cost of natural opium they did not realise the returns anticipated. This, in connection with numerous complaints from people who had bought the stuff, and found that it did not test 9 to 10 per cent. as represented, compelled him to abandon the unsavoury business. It is stated that before he sailed he had admitted that the stuff he sold was adulterated to the extent of 33½ per cent. He recently

made contracts at \$3.15, and some of this stock was resold to consumers at \$3.35 and \$3.45. It is believed that his experience will deter others who have gone into the business, or contemplate doing so, from putting adulterated opium on the market."

**POTASH SALTS.**—*Bichromate*: Still quoted at 3¾d. *Chlorate* is much dearer and firmly held, 5d., less on discount, being now required. *Pernanganate*: Still falling in price, and quoted at 65s. to 70s. for small crystals, according to brand. *Yellow Prussiate*: Held for 9½d. per lb. German refined *Saltpetre* firm at 18s. 9d. to 19s. per cwt.

**QUICKSILVER.**—The market is decidedly firmer, and although the principal importers still quote 10l. 10s., second-hand holders quote 10l. 4s. to 10l. 5s. The former price has, we understand, been paid.

**QUININE.**—On the spot the market has been very flat all through the week, and there are sellers of second-hand *German* bulk at 12¼d. to 12¾d. per oz. The B. & S. agents report two sales for September-October delivery of 5,000 oz. each, at 1s. 1d. per oz., which would be a very high price in comparison with the spot quotation. They say that they are not sellers under 1s. 1½d. now.

**SCAMMONY.**—Prices of root and resin are slowly falling in value, owing to the proximity of the new crop.

**SEEDLAC.**—At the auctions on Tuesday 48 bags of good bright *Kurachee* lac, of fresh import, sold at from 74s. up to 83s. per cwt.

**SHELLAC.**—The week opened very strong, with a considerable business for delivery at rising prices. At the auctions a moderate supply of 519 cases was offered, and 255 cases sold with strong competition at an advance, for *Second orange*, of 4s. on the previous auctions and 2s. on private sale rates. Unworked, fair red to reddish *Orange*, 93s. to 95s. per cwt.; rather dull second *Button* at 5l. 7s. 6d., and ordinary dark fourths at 81s. per cwt. On the day succeeding the auctions the news cabled from Calcutta of very heavy shipments for the first half of the month flattened the market, and there were sellers at a decline. Since then the market has continued to decline, and at to-day's call the following quotations were made:—

		July	Aug.	Sept.	Oct.	Nov.	Dec.
Orange TN, sellers	..	97/	98/	98/6	sales at	sales at	sales at
" buyers	..	95/	96/	97/	98/	98/6	98/6
		Garnet AC nominal.					

**SODA SALTS.**—*Bicarbonate* firmly held for higher rates. *Ash* also improving in price. *Bichromate* selling at 2¾d. *Caustic* dearer, 60-per-cent. at 9l. 10s. to 9l. 15s.; and 70-per-cent. at 10l. 5s. to 10l. 7s. 6d. on the spot; *crystals* also higher at 60s. Thames. *Nitrate* also improving, at 8s. 1½d. to 8s. 3d. for common agricultural good; 8s. 9d. for chemical qualities.

**SPERMACELE.**—The New York market is without any animation and without prospect of any improvement. The price for there comes at 1s. 4d. to 1s. 5d. c.i.f., but in London there is a large supply in the hands of holders who have bought cheaply some time ago, and 1s. 4d. will certainly buy.

**SPICES.**—*Arrowroot* is dull and without demand, although at the auctions some new crop St. Vincent sold at 2¼d. per lb. *Cassia Lignea*: dull of sale and unchanged in price. *Chillies* are from 1s. 6d. to 2s. lower, medium Zanzibar selling at the auctions at 32s. 6d. to 33s. 6d. *Cinnamon chips*: Fair to good Ceylon, 2½d. to 2¾d.; quillings, 5¾d. to 6d. *Cloves*: Zanzibar lower for delivery, and quiet but steady, with sales at the auctions at 5¾d. to 6d. for medium dull to good bright unpicked; Penang quotations lower at 6¾d. to 7d., and fair to rather dark Amboyna also cheaper at 5¾d. to 6¼d. *Ginger*: *Cochin* dull and selling at lower prices; 282 packages were mostly disposed of at 14s. to 15s. for cuttings, 15s. 6d. for small rough, 24s. 6d. for medium and small native cut, and 69s. for good bold cut; Jamaica in good supply, and about half the quantity offered sold at a decline of 2s. to 3s. per cwt.; common to good bright bleached at 62s. up to 77s. *Mace* quiet; ordinary to good pale West India, 2s. 2d. to 2s. 8d. *Nutmegs* firm and somewhat dearer, with sales of Penang (82 to 83) at 2s. 9½d.; telegrams received from the Island of Banda, where the bulk of the crop is produced, say that the July-August crop is quite a failure, and the stocks are small, and said to



be insufficient for the requirements. *Black pepper* is decidedly dearer, both for arrival and on the spot. At the auctions good Tellicherry sold at 5*d.*, grey at 4½*d.* *White pepper*, on the spot, is also dearer; fair Penang, 6½*d.* to 6¾*d.*; Singapore, 9½*d.* *Pimento* steady, but rather dull; medium to good, 2½*d.* to 3*d.* per lb.

TEA.—*China*: There is no change to report in Congous, old teas selling with difficulty at poor prices, and till the second and third ships arrive there is no great assortment of new teas, the desirable teas in the *Moyune* having been pretty well sorted out by this time. There is scarcely any tea left ex *Moyune* under 11*d.*, these grades having gone fairly freely into consumption. Scented Capers are in good supply, and being very well scented command good prices. *Assams* remain very dear, the sales being extraordinarily small, and buyers are only filling their immediate and pressing requirements. *Ceylons* are steady at last week's rates.

TONQUIN BEANS.—The new crop of Angostura beans is now arriving in New York, and it is said that the total will amount to about 125 tons, which is very considerable. Prices in the meantime are declining, and quotations come at 6*s.* 3*d.* to 6*s.* 6*d.* per lb. c.i.f. terms. *Pará* beans are quite out of stock, and of the new crop nothing is yet known. In London a parcel of fine but rather damp Angostura beans is being offered at 6*s.* 6*d.*, London terms.

WAX (JAPAN) is exceedingly slow of sale, and offering at 43*s.* to 43*s.* 6*d.* per cwt. for good hard pale squares.

#### CHEMICALS IN THE NORTH OF ENGLAND.

THE market for heavy chemicals has been very firm during the past week, and prices all round are higher, with many inquiries for forward deliveries. The makers, however, will not quote beyond end of September, pending negotiations now proceeding for the formation of the Chemical Union. The general feeling is that the scheme will be successfully floated; but nothing will be definitely known until the prospectus of the undertaking is submitted to the general public, and it is seen how the shares are taken up. Meanwhile, the different inspection committees are visiting the various works of the manufacturers, making valuations, and it will be some time yet before the whole of the works are examined.

BICARBONATE OF SODA continues firm at 5*l.* 15*s.* per ton, less 2½ per cent. discount, for 1-cwt. kegs, f.o.b. Liverpool, prompt delivery, with usual allowances for larger packages.

BLEACHING-POWDER is still advancing in price, and makers' quotations are getting stiffer according to quantity they have to dispose of. There is large inquiry for delivery over the next six months, and all 1891; but makers will not quote beyond September. Quotations are 5*l.* to 5*l.* 2*s.* 6*d.* per ton on rails for softwood casks, and 5*l.* 5*s.* to 5*l.* 10*s.* per ton in hardwood casks, f.o.b. Liverpool, both less 2½ per cent. discount. Glasgow prices, 5*l.* to 5*l.* 2*s.* 6*d.* per ton, f.o.r.; Tyne market, 5*l.* 5*s.* to 5*l.* 7*s.* 6*d.* per ton for prompt shipment, in softwood casks; and prices range from 5*l.* 10*s.* to 5*l.* 15*s.* for softwood casks, and 5*l.* 15*s.* to 6*l.* per ton for hardwood casks, for delivery August to September. For delivery ex ship Thames 5*l.* 15*s.* to 5*l.* 17*s.* 6*d.* per ton for prompt, with usual extras of 20*s.* per ton for 1-cwt. kegs, 15*s.* per ton for 1½-cwt. kegs, and 5*s.* per ton for 3-cwt. casks.

CAUSTIC SODA has continued its upward course during the week, and the market closes very firm, with makers well sold for this month's delivery. 60-per-cent. white, 8*l.* 17*s.* 6*d.* to 9*l.* per ton; 70 per-cent., 9*l.* 17*s.* 6*d.* to 10*l.* per ton; 74-per-cent., 10*l.* 17*s.* 6*d.* to 11*l.* per ton, all less 2½ per cent. discount, f.o.b. Liverpool. Newcastle market very strong for 77-per-cent. at 10*l.* 10*s.* per ton; and ground and packed in 3 to 4 cwt. barrels, 13*l.* 10*s.* per ton, net cash, f.o.b. Tyne.

CREAM CAUSTIC very firm, and prices vary considerably, according to makers' ideas: 7*l.* 10*s.* to 8*l.* per ton on rails, and 7*l.* 15*s.* to 8*l.* 5*s.* per ton f.o.b. Liverpool, less 2½ per cent. discount for prompt delivery.

CHLORATE OF POTASH also higher, and market steady at 5*d.* per lb., less 5 per cent. discount, at usual ports of shipment.

HYPOSULPHITE OF SODA very scarce and in good demand, both for home and foreign consumption: 5*l.* 5*s.* per ton in casks, and 5*l.* 15*s.* per ton in 1-cwt. kegs, less 2½ per cent. discount, f.o.b. Tyne; 6*l.* per ton for casks, and 6*l.* per ton for kegs, less 2½ per cent. discount, on rails at Manchester or Liverpool.

SODA ASH shows signs of improvement, and prices are stiffer. It is reported that the promoters of the Chemical Union expect to make some arrangement with the ammonia alkali manufacturers to prevent the severe competition in this article. Carbonated ash quoted 1½*d.* per degree and Caustic 1½*d.* to 1¾*d.* per degree, less 2½ per cent. discount, f.o.b. Liverpool. Tyne market is also better, and prices range from 1¼*d.*, less 2½ per cent., to 1½*d.* net, according to brand.

SODA CRYSTALS have been advanced on the Tyne, and makers ask 2*l.* 12*s.* 6*d.* per ton in casks, gross weight, 2*l.* 12*s.* 6*d.* per ton in 2-cwt. bags, net weight, and 2*l.* 15*s.* per ton in 1-cwt. bags, net weight, f.o.b. Tyne. For delivery ex ship Thames price is 2*l.* 19*s.* to 3*l.* per ton in casks, gross weight. Liverpool market is firm at 3*l.* per ton on rails, and 3*l.* 5*s.* per ton f.o.b. Liverpool, packed in 3-cwt. barrels, net weight.

SULPHATE OF COPPER.—Market flat and business small, with prices declining: 19*l.* to 19*l.* 10*s.* per ton, less 5 per cent. discount, f.o.b. Liverpool, for prompt, and lower prices for later delivery; 20*l.* per ton quoted for early months of 1891.

SULPHATE OF SODA.—Market firm, owing to large sales in the Lancashire district: 30*s.* per ton on rails at Widnes and St. Helens, with sales at this figure up to September; for delivery f.o.b. Tyne price is 30*s.* per ton in bulk, and 41*s.* to 42*s.* per ton ground and packed in casks for export shipment.

#### THE GERMAN MARKETS.

HAMBURG, July 15.

THE week under review has been of an excessively dull character as far as the drug market is concerned, and there is scarcely any diminution in our stocks. In these circumstances holders are apt to try to induce business by lowering their prices, hence many articles are quoted slightly lower. The quietness is ascribable in the first place to the season of the year, which is not a good one for business, and also to the reaction of the strikes which have prevailed in our country during the spring. The following alterations have to be noticed.

AGAR AGAR is very scarce, and the small supplies are held at from 3*m.* upwards.

ANTIMONY.—For crude *Japanese* high prices are still being paid 93*m.* to 95*m.* on the spot.

BALSAMS.—Both *Copaiba* and *Peruvian* are without business.

CAMPHOR (REFINED).—Dull at 3.20*m.*

GUM ELEMI.—Fresh imports have arrived; they show beautiful white quality, but the owners are asking high prices.

HONEY.—More interest has been shown, and higher rates are paid.

JALAP.—Almost without stock, and not obtainable under 2.75*m.* There is no doubt that prices will further advance.

SPERMACETI.—Owing to the considerable stock and the absence of demand for the trade, prices are lower, and there are already sellers at 2.50*m.*

OIL (COD-LIVER).—The market is rather better, with a good many buyers.

WAX.—*Japan*: Unchanged, and obtainable chiefly at 84*m.* Of *Carnauba* wax our stocks are getting very small indeed, and at each transaction higher prices are demanded. In *Bees'-wax* more money has been paid for all varieties.





### Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinctive nom-de-plume.

Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulae consult the last volume, if you have it.

Letters, queries, &c., will be attended to in the order received.

### Pharmacy Act (Ireland) Amendment Act.

SIR,—Is it possible that, even at the eleventh hour, the representatives of the Pharmaceutical Society of Ireland can be induced to withdraw from the attitude of wooden-headed opposition which they have taken up towards this Bill? What have they done, or what can they hope to do, in the way of moulding it to the advantage of the Society by following their present tactics?

In its passage through the House of Commons not one phrase—not one word—has been altered at their instance; and, as it stands, it is infinitely a worse Bill than that which they rejected a year ago.

An impromptu amendment, proposed by Mr. Sexton, not in any way suggested by the promoters of the Bill, has knocked out of the 14th section a very important safeguard. The result of the change is that the chemists and druggists prior to 1875 can snap their fingers at the Act of the Society; and one of the main purposes of the Bill will be frustrated if it remains in its present form.

What else could be expected? Page upon page of amendments was placed on the orders, without any understanding being come to with the promoters as to what was important and what not. A show of fight was made upon one amendment, which, if adopted, would have knocked the bottom out of the Bill. It was not even pressed to a division; and, the field being abandoned, it was open to any member of the House to cut and carve the Bill as he pleased.

Had the representatives of the Society accepted the inevitable (as you have more than once advised them), by agreeing with the promoters upon useful amendments, they would have made such an impression on the Bill as would have made it much more favourable to the Society's interests.

I can bear testimony to the fact that the promoters were ready to listen to any proposal which did not go behind the agreement which they entered upon last year.

Something is yet possible in the House of Lords, though infinitely less than might have been done in the other House.

If the representatives of the Society now fail to make the most of the situation, they must be held to account by every licentiate of the Society for opportunities lost and actual mischief done. There are grave defects in the measure, which, by unanimous effort on the part of all concerned, may be removed, but which may remain uncorrected if an abject *non possumus* remains the only policy of the Society.

Let the licentiates take a note that the wild prosecutions undertaken by the Council, which have dissipated the small capital of the Society, have been the direct cause of this Bill being forced on this session: and that, had the compromise Bill agreed upon last year been accepted by the Council, the Society would be in a much stronger position financially, and would not have to swallow the bitter pill now being forced upon them by their despised opponents.

Yours faithfully,

July 15.

J. E. BRUNKER.

### "Lawyers on Pharmaceutical Law."

SIR,—I have just read your leading article in the current issue, "Lawyers on Pharmaceutical Law." It is some time since I have met with such a relentless review of any book, and am satisfied that in the present case it is richly deserved. Such works need very rough handling. The purchaser of a book having the title and pretension of "Medical Law for Medical Men" may reasonably expect to find the subject-matter to be fact, and not a mass of pure fiction. If a book professing to be a guide misleads, it extinguishes its own *raison d'être*.

It is to be hoped the chapters on medical law are a little less slipshod.

I am, yours truly,

Clifton, June 12, 1890.

T. C. RICHARDS.

### Shop Hours—What One of the Obstructionists Says.

SIR,—I have read with some interest your article in to-day's CHEMIST AND DRUGGIST re "Shop Hours," which seems directed chiefly towards the relief of assistants, although you are rather rough on the "struggle-for-lifers," as you somewhat sarcastically call them; by-the-bye, I fancy most of us are in that category nowadays.

With regard to the assistants, I don't see much difficulty, as the employer could easily arrange to give them time for recreation without shutting up, as there are stock times in most businesses where this could be done. But I should like you to point out the remedy for cases like my own, where I work my business entirely alone, having neither apprentice nor assistant, and open from 8 A.M. to 9 P.M. six months of the year, and from 8.30 A.M. to 8 P.M. the other six months; and even then I find the customers come in, when pulling down the blinds for the night, with the remark, "Oh! I didn't know you closed so early; thought chemists were always open!" and have constant rings at the bell up to 10 and past.

Of course, in a large town, some relief can be generally obtained by engaging a *locum tenens* occasionally, but it cannot be done in small towns so well, as the railway fares make it too expensive. The consequence is, that I have worked for three-and-a-half years right away through Sundays, Bank Holidays, Christmas Days, &c., without any relief. I do not do it, as you suggest some of us do, for the love of the thing, but simply because I cannot help myself.

Our local tradesmen here decided to commence closing this week at 2 P.M. on Thursdays, and asked me to do the same, the other chemists here also saying they would if I would. But, as two of the three other chemists keep assistants, they could easily do so, while, if I did, I should have had to pull down my blinds and still be here hard at work, as I dispense for a firm of medical men. I therefore declined, although I told one of my *confrères* I was quite agreeable to do so if we did it on fair terms—that is to say, *absolutely close*, and let there be no attendance at all—which he declared to be impossible; and I think so too. Nobody would be more pleased at close-time than the single-handed man; but I do not see how it is to be worked—do you?

Yours faithfully,

Teignmouth, July 12.

JNO. E. RYDER.

### Registration of Chemists and Druggists.

Mr. J. Walker, of Glasgow, has sent to us the following copy of correspondence which has passed between himself and the registrar appointed under the Pharmacy Act, referring to an application for registration. Mr. Walker, we gather, considers that the judgment of the High Court in the Wheeldon case affects the interpretation of the clause in the Pharmacy Act which authorises the registration of chemists and druggists who were in business before August, 1868. It will be noticed that Mr. Walker has failed to convince the Pharmaceutical Council of the soundness of his claim. To make his contention clear, it will, perhaps, be desirable to quote the words of the Pharmacy Act, 1868, under which the registration is claimed. Section 5 says that chemists and druggists "within the meaning of the Act" were "entitled to be registered under the Act without paying any fee for such registration" if the proper application forms were sent in before December 31, 1868. Section 3



defines "chemists and druggists within the meaning of this Act" as "persons who at any time before the passing of this Act have carried on in Great Britain the business of a chemist and druggist in the keeping of open shop for the compounding of the prescriptions of duly qualified medical practitioners." Persons who had passed, or who should pass, the Minor examination, were also included. If application was not made before the date mentioned the person registered would have to pay the same fee as persons admitted to the register after examination under the Act. The application for registration is required to be accompanied by declarations (1) from the applicant, stating he was "in business as a chemist and druggist in the keeping of open shop for the compounding of the prescriptions of duly qualified medical practitioners" at such a place and at such a time; and (2) by a duly qualified medical practitioner or magistrate, testifying to that fact from his own knowledge. The correspondence is as follows:—

*J. Walker to R. Bremridge, Registrar.*

Glasgow, May 5, 1890.—Now that it has been established that the seller of poisons under the Pharmacy Act of 1868 means the person actually engaged in the transaction, and not the party on whose behalf sale is made, I request you to place my name on your Register of Chemists and Druggists, or send me (for this purpose) the necessary papers to fill up. I have to state that I was actively engaged in the business of a retail chemist and druggist for some time prior to the passing of the Act of 1868, in "retailing, dispensing, or compounding poisons," and therefore, according to law, a lawful seller. I may further state that I have for over twenty-four years been continuously engaged in the business—some eighteen of which in the wholesale way.

*Registrar's Reply.*

London, May 6, 1890.—In reply to your note, if you were *bonâ fide* in business on your own account as a chemist and druggist in Great Britain prior to July 31, 1868, you are eligible for registration. Enclosed is the necessary form of declarations. The registration fee is 5*l.* 5*s.*

*J. Walker to Registrar.*

Glasgow, May 23, 1890.—I duly received yours of 6th inst., and now enclose forms signed, also registration fee, 5*l.* 5*s.*, which please duly acknowledge. I noticed what you said as to being *bonâ fide* in business on own account; but with reference to this would supplement what I said in mine of 5th by stating that I know the reading of 1868 Act was that "keeping open shop" meant the being in business on one's own account, and that "to sell," or seller, meant the party on whose behalf sale was made; but, to quote from a leading article in last number of your *Pharm. Journal* (page 936), "Parliament, under the influence of various conflicting interests, passes Acts, but it is the subsequent judicial interpretation of those Acts that makes law"; and I am advised that, by the recent judicial decision in Court of Queen's Bench, the seller now means the person actually engaged in the transaction, and that the Act of 1868 must be construed by said judgment, and further, that as I was engaged in the business, and was therefore a lawful seller, or keeper of "open shop for retailing, dispensing, or compounding poisons" and prescriptions, and thus had legal right to the title of chemist and druggist for some time prior to the passing of the Pharmacy Act of 1868, and as there is nothing in the Act depriving me of that right, I have, according to recent judicial interpretation of Act, just claim to be put on your Register of Chemists and Druggists, especially as (as mentioned in my former) I have not ceased to be engaged in the business of chemist and druggist; so you will please send me certificate, or whatever it is you give to effect that my name has been placed on register.

*Registrar's Reply.*

London, May 24, 1890.—I am in receipt of your letter of yesterday's date and the enclosures therein referred to. Am glad to understand from the remarks contained in your letter that you were not in business on your own account as a chemist and druggist prior to July 31, 1868?

*J. Walker to Registrar.*

Glasgow, May 27, 1890.—I am in receipt of yours of 24th, and in answer to your query have to say that I thought I had

made it plain in my letters of 5th and 23rd inst. that I was "not in business on my account as a chemist and druggist prior to July 31, 1868"—that is not my claim. My case, as before explained, is that, as generally admitted at the annual meeting of your Society last week, from the President down, the judgment in the Wheeldon case gives "practically a new Act of Parliament," and you must not overlook the two sides of the question—the judges defined the seller as the person actually engaged in the transaction. Now, that was exactly my position prior to the passing of Pharmacy Act of 1868. I was then, in the phraseology of the Bill, already engaged in the business of a chemist and druggist. It was then legal for me to "sell, or keep open shop for the retailing, dispensing, or compounding poisons." You must apply the same meaning to the word "seller" before passing of the Act as you do now, under, as your President says, the "new condition of things." My position is quite different from one who was not engaged in the business prior to July 31, 1868, and what it was lawful for me to do prior to that must be protected by you placing my name on your register, as having been engaged in the business before the passing of the Pharmacy Act of 1868, and thus a legal seller.

*J. Walker to Registrar.*

Glasgow, May 30, 1890.—Looking again at your letters, I desire to supplement what I have already, in my former communications, said, by pointing out the schedules C and D, sent, in accordance with Act, by me on 23rd, do not contain the words "in business on your (or my) own account," and you have no right to interpolate words that do not occur therein.

*Registrar to J. Walker.*

London, May 29, 1890.—I am in receipt of your letter of the 27th, from which it appears that you were not "in business as a chemist and druggist in the keeping of open shop for the compounding of the prescriptions of duly qualified medical practitioners" before July 31, 1868. I, therefore, decline to place your name on the Register of Chemists and Druggists. Your remittance of 5*l.* 5*s.* is returned herewith.

*J. Walker to Registrar.*

Glasgow, May 31, 1890.—After posting mine of yesterday I received yours of 29th. You overlook entirely the altered reading of Pharmacy Bill, and fall into the mistake prevalent so long, viz., that being engaged in the business of a chemist and druggist means the being in business on one's own account; but, not only does the Act not state this, but the decision—*Pharmaceutical Society v. Wheeldon*—in Court of Queen's Bench, from which leave of appeal was not allowed, lays down the very opposite, viz., that the party who makes sale, or keeps the open shop (even though on behalf of another), is the seller, or person actually engaged in the business; and as I have given you proof that I was thus "in business as a chemist and druggist in the keeping of open shop for the compounding of the prescriptions of duly qualified medical practitioners" before July 31, 1868, I have again to request that, in terms of Act, you place my name on the Register of Chemists and Druggists, and, therefore, send you herewith the bank-draft for 5*l.* 5*s.*, which you returned in your last. I hope you will now, under new condition of things, do as requested, otherwise I must reluctantly consider what other steps to take.

*J. Walker to Registrar.*

Glasgow, June 2, 1890.—Since sending mine of May 31, it occurs to me that you may lay my letters before your Council, in which case you will please also include this one, which I send to remind that the Pharmacy Act of 1868 must now be construed in accordance with the light and reading of section 15—the same meaning given in Court of Queen's Bench, to "sell, or keep open shop for the retailing, dispensing, or compounding poisons" (section 15), must be given to "keeping open shop for the retailing, dispensing, or compounding of poisons," in preamble and elsewhere in Act, excepting, of course, section 17. I say apply same construction, viz., that it is the person actually engaged in the transaction who is the seller or keeper of open shop, and you will find I was, before passing of Act, legally "already engaged in such business," and known as a chemist and



druggist; and as I have complied with terms of section 5, in sending schedules C and D properly filled up, also registration fee of 5*l.* 5*s.*, I am entitled to be registered as a chemist and druggist. I may further add that the words, "in business on his own account," in sections 18 and 19, have reference only to eligibility for election as members, or to the Council, of Pharmaceutical Society, and must not be transposed to sections 3 and 5, defining chemists and druggists entitled to be registered under the Act.

*Registrar to J. Walker.*

London, June 3, 1890.—I am in receipt of your letters of May 31 and June 2, and have considered the statements therein contained. As it is quite clear that you did not carry on business as a chemist and druggist in the keeping of open shop for the compounding of the prescriptions of duly qualified medical practitioners prior to July 31, I must adhere to my decision not to place your name on the register. Your remittance of 5*l.* 5*s.* is again returned herewith.

*J. Walker to Registrar.*

Glasgow, June 5, 1890.—I beg to acknowledge receipt of yours of 3rd, in which you return my bank-draft on London for 5*l.* 5*s.*, but, as I do not accept what you say—that "it is quite clear that you did not carry on business as a chemist and druggist in the keeping of open shop for the compounding of the prescriptions of duly qualified medical practitioners prior to July 31," I give this notice that, to keep myself in order for any future action, I will, in terms of section 12, appeal from your decision to the Council of the Pharmaceutical Society. This appeal will follow.

*Copy of Appeal to the Council of the Pharmaceutical Society.*

Glasgow, June 18, 1890.—In terms of the 12th section of the Pharmacy Act of 1868, I make this appeal from the decision of the Registrar on my claim to be placed on the Register of Chemists and Druggists, and, for your guidance in deciding, enclose herewith copy of our correspondence in the matter.

As you will see from said correspondence, I claim, under the most recent judicial interpretation of 1863 Act, to have been a lawful seller, and, as per my declaration, schedules C and D, "in business as a chemist and druggist in the keeping of open shop for the compounding of the prescriptions of duly qualified medical practitioners," prior to July 31, 1868.

That the rendering of Act arising out of the judgment in the Wheeldon case in Court of Queen's Bench is not the former reading of your Council, I point to more than one Draft Amendment Bill adopted by your Council, in which you sought to make it unlawful for any but a qualified person to conduct a branch, or keep open shop—thus showing your reading of 1863 Act was not according to legal rendering, which shows that you already had in 1863 Act what you sought in your Draft Bills.

It must now be admitted that "any person who shall sell, or keep an open shop for the retailing, dispensing, or compounding poisons," has a more comprehensive interpretation than the being in business on one's own account (as the Registrar seeks to lay down in his copies enclosed herewith); it is out of this my claim arises: for surely the same comprehensive meaning must be given to any person who did sell, or keep open shop, before date mentioned in section 15.

But the Wheeldon judgment does not stand alone in having a direct bearing on my case; other decisions go to show that the person who kept the shop was to be regarded as the seller; and a former interpretation of Act in Court of Appeal and also in House of Lords was entirely on the same lines—in the latter, Lord Selborne said: "The Act of selling, the act of compounding, and every other act mentioned in these two sections (1 and 15), whether done by the principal to whom the business belongs, or done by the person whom he employs to carry on the business"; and he further says, "he who sells, whether he be master or servant, whether he be the principal or the person delegated to conduct and manage the sales, is struck at," or referred to in these two sections—viz. 1 and 15.

In both cases—in Court of Queen's Bench and in House of Lords—you have it legally laid down that the party actually engaged in the transaction is the person doing the things

named in sections 1 and 15 just referred to. I thus come under the "all persons," and was known as a chemist and druggist, as referred to in preamble; was selling and keeping open shop before date mentioned in sections 1 and 15; had taken, or used, the title of chemist and druggist before date mentioned in section 15, and come under the "all persons" in section 3. And having given Registrar notice in writing, and furnished him with certificates according to schedules C and D, and sent him registration fee of 5*l.* 5*s.*,\* I claim, as per section 5, to "be entitled to be registered," for how else is the right and privilege I enjoyed before passing of Act (and of which Act does not deprive me) to be protected? That which it was lawful for me to do on and before 31 December 1863 I claim was lawful on and after January 1, 1869.

I overlooked mentioning to Registrar that not only did I sell (remembering the meaning of this as defined by the judges), but I also, for some time prior to passing of the Act, was the sole "keeper" of an open shop—a branch shop belonging to the chemist and druggist under whose personal supervision I had previously been a seller. I know this is embraced in my certificates, but, to substantiate what I now say, I enclose declaration (by chemist referred to) of June 7, 1890; thus I again come under section 3, in having "carried on, in Great Britain, the business of a chemist and druggist, in the keeping of open shop for the compounding of the prescriptions of duly qualified medical practitioners"; and this section says—"Chemists and druggists within the meaning of this Act shall consist of all persons who, at any time before the passing of this Act," had been doing as above mentioned.

Your consideration of this appeal, and of my correspondence with Registrar, in which my case is further gone into, is asked, in the hope that you will give instructions that my name be placed on Register of Chemists and Druggists.

*R. Bremridge to J. Walker.*

London, June 20, 1890.—I am in receipt of your letter of 18th inst., with enclosures, which shall be submitted to the Council at its next meeting.

*R. Bremridge to J. Walker.*

London, July 3, 1890.—I have to inform you that your appeal, together with all the other papers and correspondence in the case, were submitted to the Council at its meeting yesterday, with the result that I was instructed to inform you that the Council declines to reverse my decision not to place your name on the Register of Chemists and Druggists.

[Mr. Walker may probably be able to prove that he was a "seller" before August 1, 1863, in the sense laid down in the judgments quoted; but we do not see how that helps him. He has to prove that he was keeping open shop, and (taking the usually accepted meaning of that expression) he does not seem to have done this.—ED. C. & D.]

## DISPENSING NOTES.

*The opinions of practical readers are invited on subjects discussed under this heading.*

*Frank English.*—Camphor, Butyl Chloral, and Quinine Pills.—The best excipient wanted:—

Camphor..	..	..	..	..	gr. j.
Butyl chloral hyd.	..	..	..	..	"
Quin. sulph.	..	..	..	..	"

Ft. pil.

We have no difficulty in obtaining a pill perfect for colour and consistency. Rub up the camphor and quin. sulph. (without S.V.R.), then add butyl chloral and half a grain of p. tragacanth; mass with equal parts of glycerine, syrup, and water.

\* This he returned; but I will re-send the moment he is prepared to accept.—J. W.



**"The Fer. Am. Cit., Quin. Hyd., Acid. Citric. Mixture."**

SIR,—The above can be dispensed clear if prepared as follows:—

Fer. am. cit.	..	..	..	..	3j.
Acid. citric.	..	..	..	..	gr. 102.
Aq. de-t. ad	..	..	..	..	3vj.;

Mix, and heat to boiling; then add—

Quin. hyd.	..	..	..	..	5ss.
Acid. citric.	..	..	..	..	gr. 102
Aq. de-t. ad	..	..	..	..	3vj.

Quin. sulph. gave a similar result.

I am, sir, yours truly,

GEORGE ROE.

89 17. **Quinine, Iodide of Potassium with Ammonia.**—"*Alpha*" is bothered, even with the aid of the "Art of Dispensing"; he is not satisfied with the appearance of this mixture:—

Pot. iodid.	..	..	..	..	3j.
Quin. sulph.	..	..	..	..	3j.
Syrupi	..	..	..	..	3iv.
Spt. ammon. ar.	..	..	..	..	3iij.
Aquæ ad	..	..	..	..	3iv.

Try again! We have no difficulty. Dissolve quin. sulph. in spt. ammon. arom, add pulv. acaciæ 5ss, then aqua 3vj.; mix well, add syrup, then the remainder of aqua gradually, dissolving pot. iodid. in last portion aqua before adding. This gives an emulsive-looking mixture, easily shaken up.

93/5. *Facta non Verba.*—We read your copies of German prescriptions as follows:—

1.

					Grammes.
Ferri cit. c. quinia	..	..	..	..	1
Vin. xerici	..	..	..	..	250

2.

					Grammes
Dec. rhei	..	..	..	..	2½
Sal therm. carol. (Carlsbad salt)	..	..	..	..	5
Syr. cort. aurant.	..	..	..	..	10

### LEGAL QUERIES.

91/16. *J. S. W.*—We think neither medicine requires stamping. The liability of the saline would depend, however (in the view of the authorities), on its composition. They consider that if it should be made the vehicle for the administration of a medicine beyond those which make it a mineral-water salt, it does not come within the exemption. This and the corn-solvent question are both treated fully in Alpe's "Medicine Stamp Duty."

93/55. *W. O. Smith.*—The only statute which can interfere with a chemist prescribing is the Apothecaries Act, which says he may not "act as an apothecary." The Society of Apothecaries do not take proceedings in the ordinary and inevitable cases of counter practice. See case reported in this journal on June 14, 1890.

93/37. *Chloroform.*—A month's notice is the custom of the trade, and this will prevail in the absence of a specific arrangement.

93/3. *Attraction*, referring to the paragraph on page 41 of the last issue, which states that Mr. A. Domeier has patented the addition of 4 per cent. of glycerine to eau de Cologne, and that he claims the addition for other perfumes, says: "This is no discovery of Mr. Domeier's. I have known and used it in my perfumes, with the same object, for years, and did not make a secret of it. I shall be glad of your opinion respecting his pretension." The patent is invalid if it could be shown to the satisfaction of a Court that the process was not original when the patent was applied for.

88/23. *IIomer.*—In the absence of any special arrangement when the engagement was made, the death of the master puts an end to the service, and the servant is discharged by such death. It follows, therefore, that a servant is not obliged to remain with the representatives of the deceased.

87/17. *Lex Legis.*—It is not necessary for an assistant to give notice to determine his engagement on the day of the month when the engagement was commenced, or on any particular day. Our correspondent does not say upon what day he gave notice, but we do not know that it has ever been decided at what particular hour the notice terminates. Having regard, however, to other notices, we should say that the engagement terminated either at the end of the business day or at 12 o'clock at night on the day of the expiration of the notice. For instance, if the notice were given on the 26th of the month, it might be taken for granted that such notice would expire at the end of the business day on the 26th of the next succeeding month.—This correspondent also says that in his indentures he agreed not to set up within fifteen miles of his master. That was in a Devonshire village. The master has since sold his business there, and taken one in London. Does the agreement apply to London? [The answer to this query would depend very much upon the wording of the covenant; the general rule is for such covenants to say that the servant will not set up within a radius of so many miles of the master's shop. If this were the case, and the master has removed from Devonshire to London, the apprentice can set up within fifteen miles of the master in London. If, however, the covenant said that he was not to set up within fifteen miles of the place where, for the time being, the master was carrying on business, then an injunction would be granted to restrain the apprentice from setting up in London. The courts, however, are very averse to enforcing covenants in restraint of trade, and they would not be inclined to construe such covenant in favour of the master. There is another point, and that is, if the apprentice were an infant at the time the indenture was entered into, it is doubtful if the court would enforce the covenant at all. Perhaps, if the indenture expired some time after the apprentice was of age the court might consider that he had confirmed same, and was therefore bound by the covenant. In a recent case, however, in which the celebrated Mr. Barnum was one of the defendants, an injunction to restrain an apprentice who had entered into a similar covenant was refused.]

### MISCELLANEOUS INQUIRIES.

*A large number of correspondents ask us for formulæ and other information already published in this journal. It is not fair to more careful readers that we should frequently repeat such information, and so long as the back numbers containing the formulæ or replies required are in print we must decline to do so. Back numbers of our weekly issue can be obtained from the publisher at 4d. each.*

82/44. *Corioso.*—There is a very good account of **Electro-Therapeutics** in the "Medical Annual" for 1889 (John Wright & Co.). The latest book on the subject is Dr. J. R. Tunmer's.

82/47. *Subscriber.*—(1) The starch gloss is simply powdered French chalk. (2) Leeches require little feeding. There are suggestions in vol. 31, particularly the numbers for July, 1887, which you may find of advantage.

37/34. *H. Ridley.*—The sample of mahogany stain which you send appears to be an aniline dye—probably maroon lake.

86/57. *E. H. C.*—**Borax for Insects on Plants.**—Use a solution 3j. to Oj. of water and apply with a syringe.



118/3. *M. M. A.*—(1) Formulæ for Chlorodyne.—See page 94, volume xxiv., 1889. (2) Seidlitz-powder Formula.—The one you mention as probably out of date is the one commonly accepted, and the *only* one we consider you are justified in using for indiscriminate sale. It is really what your customers want when they ask for a seidlitz powder. Your seidlitz powder would not be long "popular" if you were to base your formula upon an analysis of the spring. The usual "fruit-saline" would be nearer it then. Here is Naumann's analysis, which is practically correct:—16 oz. of the water contained 126 grains of saline matter, consisting of:—

	Grs.
Magnes. sulph. .. .. .	104
" carb. .. .. .	3
" chloride .. .. .	3
Calc. sulph. .. .. .	8
" carb. .. .. .	8

(3) Essence of Pennyroyal to prevent Mosquito Bites.—Certainly. Any of the strong-smelling pungent oils would assist your tincture of Dalmatian flowers—pennyroyal, cajeput, rosemary, camphor, whichever you consider least offensive to your customers. Essence of pennyroyal is usually made 3j. oil to 3vij. spirit.

80/12. *Assist.*—For details of suitable Refrigerator, see description, at page 855 (June 28), of the "Franklin Refrigerating Apparatus." You will find it cheaper to buy one than to attempt making.

83/33. *F. M. E.*—(1) Foaming for Ginger beer.—Quillaia (see pages 27 and 875 of this volume). (2) Fresh lemon-juice contains from 6 to 7 per cent. of citric acid.

87/37. *A. I. F.*—The best way to Get Rid of Sulphur Fumes after disinfecting rooms is to open all the doors and windows, and allow a free passage of air for some hours. We may say this is the *only* way, and is a great aid to the thorough disinfection.

89/63. *Vincus.*—Lime or Carrara Water, as it is sometimes called, is prepared by filling the syphons with good clear lime-water, and passing the gas into it until sufficiently charged. A precipitate is at first formed, which is redissolved by the excess of CO<sub>2</sub> gas.

To Anonymous Correspondents.—*B. B.*, *Alkalino*, and *A. J.*—Why do you not give your names? *F.*—We shall try to get confirmation of the fact which you bring to our notice, but we shall not publish it on the strength of an anonymous communication.

85/37. *H. B.*—For details of processes involved in the preparation of alcohols, ethers, &c., you would find "Payen's Industrial Chemistry" (Paul) or Ure's "Dictionary of Arts, Manufactures, &c." useful; but in the preparation of these substances the operator is guided to a large extent by his own knowledge and experience.

84/49. *G. F. C.*—We are not able to give you the recipe you ask for. The published formula you mention gives a product more or less similar to the proprietary article.

89/13. *Post Office.*—Write to the Secretary, G.P.O., London, E.C.

84/57. *R. J. D.*—Liquid Saponaceous Dentifrice.—See DIARY, 1889, under "Foaming Dentifrice"; but make tr. quillaia by using equal parts of spirit and water instead of formula given.

91/12. *J. B. P.*—The Zingit Company (Limited), 38 Snow Hill, London, E.C.

82/46. *A. J.*—Please refer to the index issued last week.

*Inf. Digitalis.*—*Adelaide* (92/58) writes:—In your issue of last week, under "Medical Gleanings," in your note upon cold infusion of digitalis you give 300 grs. = 8 oz. Ought it not rather to be = 10 oz.? It is really nearer 10½ oz.

*Sequah's Prices.*—Mr. William Bowness, Workington, writes to say that he was selling Sequah's preparations at the price obtaining in the neighbourhood, but that Sequah's agent had come to the place and had cut the price to 1s. 6d. Is this so, Sequah?

94/13. *R. F.* sends us a prescription-envelope which he has met with, and with which he is "sufficiently disgusted to mention it to the trade" as a specimen of what not to do. The envelope is a plain one, with the patient's name written thereon, below which appears the business stamp of the chemist, and the left-hand top corner bears a coloured advertisement of a well-known proprietary article "sold here."

91/64. *H. H.*—Your sample of table salt is a very pure chloride of sodium. The presence of chlorides of magnesium and calcium is said to be the cause of ordinary table-salt becoming deliquescent. Corbett, Worcester, advertises a pure table-salt: yours is probably a product of that company; they guarantee that it will not cake.

#### Information Wanted.

[*Replies to the following requests are solicited by correspondents of THE CHEMIST AND DRUGGIST.*]

85/67.—The best apparatus for manufacturing powdered meat by means of an "Autoclave."

118/3. Colonel Apperley's formula for Indian mangelotion.

82/43. Thionine—its uses and dose.

92/28.—*Vulcanite* wishes to know usual Charges for Dental Work. Say quarterly contracts for attending to and regulating children's teeth as required.

83/25.—Where to obtain small electric lamp as used by Sequah.

#### Information Supplied.

81/73. Pills Sticking Together.—These extracts and a resin are very fusible. It would be wrong to use pulv. aloes vice extract, as the resin it contains would be bad for hemorrhoidal subjects. Use pulv. nuc. vom. instead of extract, or a portion thereof.—EXPERIENTIA DOES IT.

82/53. Cement for Glass to Brass.—Mix with the plaster of Paris about ⅓ of p. sacch. alb. It will answer.—EXPERIENTIA DOES IT.

85/71. *Nil Desperandum* would not find the kernel of a hazel-nut or of a peach or plum germinate any more than a tonquin-bean would. Shell tonquin-beans are a rarity. I only met with them once—half-a-century ago. They were supplied by an old firm—Brown, Roper & Arthur—now extinct, I believe.—EXPERIENTIA DOES IT. [They are occasionally on the market, and are to be found in museums, &c.—*Ed. C. & D.*]

#### Tinct. Lobelia Acid.

SIR,—In reply to "H. E. S.," I have pleasure in giving you the following formula for Tr. Lobelia Acid, taken from Beache's "Practise of Medicine":—

Lobelia inflata .. .. .	3ij.
Cayenne .. .. .	3ij.
Vinegar .. .. .	℥j.

Place the solid ingredients in a stone bottle, pour the vinegar, boiling hot, upon them; steep for ten days, closely corked. Dose for a cough half a teaspoonful; for asthma or croup a larger dose.



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That our efforts in this direction have been appreciated is proved by the number of *unsolicited* testimonials we have received from nearly every town in the country, of which the following is a specimen:—

GENTLEMEN,—

The Pharmacy, Morecambe.

Please send 5 gall. 56 o.p. as before. I have pleasure in saying I have always found your spirit answer all tests, which is more than I can say of all I have had from different places, and also to be practically free from odour.

Yours faithfully,

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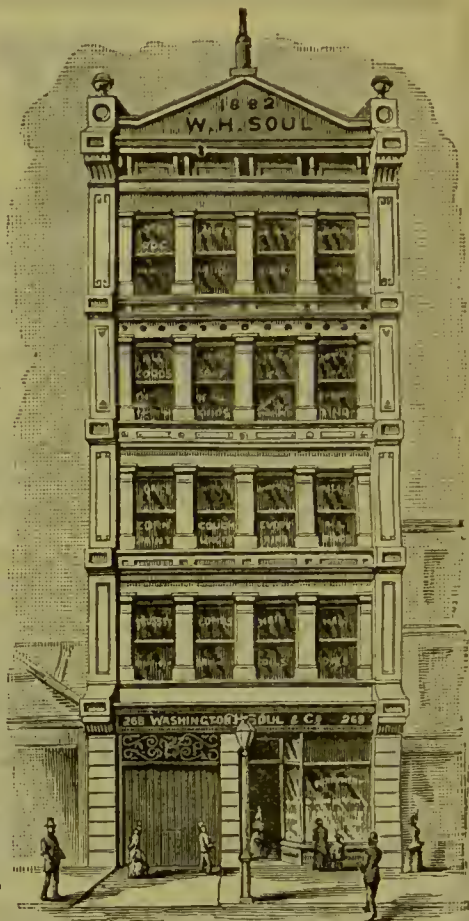
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fill any lines from their  
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Trade may be unable  
to obtain from their  
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FANCY SOAPS, SPONGES.



IMPORTERS OF BRUSHWARE, CORDIAL MAKERS,  
MACHINERY, CORKS, BOTTLES, LABELS,  
PHOTOGRAPHIC CHEMICALS AND MATERIALS.

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*Agencies for Patent Medicines and other Goods solicited. Travellers cover New South Wales and Queensland.*

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Substitute for Iodoform. **Odourless, easily soluble, quite inoffensive. No injurious secondary effects. Easy application in any form, e.g.,** Dusting Powder, either pure or with Talc, Ointment with Lanoline, Soziodol Cotton and Gauze, Bougies, Watery Solutions of different Concentrations, Collodion, etc.

Great success obtained in **antiseptic surgery, skin diseases, in the most various diseases of the nose, pharynx, and larynx; in chronic processes of inflammation of the auditory organs, and the superior respiratory passages, in tuberculous ulcerations, especially in the throat; in diseases of the eye, in gonorrhoea, in the treatment of gynaecological cases, in disorders of the stomach; in articular rheumatism and other forms of this disease; in cancer, and in many other diseases.**

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FOR THE TREATMENT AND CURE OF ALL

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Claims to be a Specific for all Congestive and Inflammatory conditions of the Respiratory Apparatus, and will be found efficacious in

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Inflammation and Congestion of the Lungs, Pneumonia, Pleurisy, Whooping Cough, Croup, Diphtheria, Pharyngitis, Laryngitis, Catarrh, Sore Throat, Quinsy, Enlarged Tonsils, Hoarseness, Loss of Voice, Colds in the Head, Hay Fever, and all other Complaints of the Respiratory Organs.

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SET OF APPARATUS FOR ADMINISTRATION, 15/. PAMPHLETS AND SHOWCARDS FREE ON APPLICATION.

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The reputation of Gelatine-Coated Pills has been created by our manufacture.	DOZ. BOTTLES containing		Being completely sealed, all substances are perfectly preserved from oxidation.	DOZ. BOTTLES containing	
	25 PILLS.	100 PILLS.		25 PILLS.	100 PILLS.
▲ Iodin .....	5/	16/	Quinine, Bisulphate .....	5/	16/
" .....	6/	20/	" .....	5/	16/
" .....	7/	24/	" .....	5/8	18/
" .....	11/	40/	" .....	7/8	26/
" Compound .....	7/	24/	" .....	8/8	34/
" and Strychnine .....	7/	24/	" .....	11/8	42/
" Strychnine and Belladonna .....	7/	24/	" Sulphate .....	5/	16/
" or Aperient, No. 1 (Clark) .....	9/	32/	" .....	5/	18/
" " No. 2, No. 3, No. 4 .....	7/	24/	" .....	6/	20/
Morphine Muriate .....	7/	24/	" .....	8/	28/
" " .....	9/	32/	" .....	10/	36/
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FOR FATIGUE OF MIND AND BODY.

A NEW RESTORATIVE TONIC  
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There is a minute animalcule which is destroyed by the  
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effect in reviving & restoring the exhausted energies of  
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Obtained by the action of Metallic Zinc on Chloroform and Alcohol.  
Discovered to be a general Anesthetic by Dr. RICHARDSON in 1867.  
Bottles, 12s.; 8-oz., 8s. 6d.; 4-oz., 4s. 6d.; 2-oz., 2s. 6d.  
**1000 POUND ANESTHETIC ETHER.**  
For producing Local Anesthesia.  
In 4-oz., 10-oz., and 20-oz. Stopped Bottles, 2s., 4s., and 7s.  
**OZONIC ETHER.**  
In 2-oz., 4-oz., 8-oz., and 16-oz. Stopped Bottles, 2s., 3s. 6d., 7s., and 10s.  
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First introduced as a Medicine by Dr. RICHARDSON.  
**ETHYLATE OF SODIUM**  
Dr. RICHARDSON's Formula, for removing Nævi, &c. In 1/2-oz. & 1-oz. Bottles, with elongated Stoppers for applying the Caustic, 2s. 6d. & 4s. 6d.  
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In Boxes, 2s. 6d. each.

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If any Chemist advise me of the fact that he Stocks it (no matter whence obtained), I will advertise his Name and Address as an Agent in one or more of the Athletic papers; this will create him a certain demand for it.

It is USED and RECOMMENDED by HOLBEIN, KEEN, NETTLETON, and most of the Leading Cyclists.

It is well got up, and makes an ornament to the counter.

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Acetate of Lead. Permanganate of Potash.  
Muriate of Ammonia.

Glycerine. Alcohol. Ethers. Chloroform. Acetanilide.  
Boracic, Lactic, Tannic, Tartaric Acids.  
Hypo-Soda. Oxalate of Potash. Hydroquinone.

PRICE LIST ON APPLICATION.

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PERFECT IN PURITY AND UNIFORM IN STRENGTH.

The most efficacious antacid and mild aperient for Delicate Constitutions, Ladies, Children, and Infants.

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# MORSON'S

## PURE NATURAL SALICYLIC ACID AND SALICYLATE OF SODIUM

### FROM OIL OF WINTERGREEN.

Experimental Research as to the General Comparative Action of the Natural and Artificial Salicylic Acids, and their Salts of Sodium. Read in the Section of Pharmacology and Therapeutics at the Annual Meeting of the British Medical Association held in Leeds, August, 1889. By M. CHARTERIS, M.D., Professor of Therapeutics in the University of Glasgow, and W. MACLENNAN, M.B., C.M.

See *BRITISH MEDICAL JOURNAL*, Nov. 30, 1889.

The deductions from these experiments indicate that artificial salicylic acid and its salt of sodium are dangerous and, in large doses, fatal to animals, while salicin, natural salicylic acid, and its salts of sodium are not. That artificial salicylic acid contains an impurity or impurities, and until this or these can be extracted by the aid of chemistry the internal administration of it or its salts of sodium should be discountenanced. Large and repeated doses of the sodium salt are necessary in the treatment of acute rheumatism, and hence we may account for the restlessness, the confusion, and the delirium sometimes attendant on its use, which have been testified by clinical experience. It is more than probable, too, that the retarded convalescence occurring in some cases of acute rheumatism after the salicylate treatment is due to the great and protracted prostration which the impurity or impurities give rise to. It is to be remembered in connection with these symptoms that prescriptions of the salicylate of sodium are invariably made up, unless otherwise indicated, from the artificial and not the natural salt.

The specimens with which the investigations were carried on were supplied by T. MORSON & SON, London—the Natural Acid and its Soda Salt being manufactured by themselves.

Medical men wishing to avoid the unpleasant and injurious effects of the artificial products, should prescribe the Natural "preparations"—MORSON'S.

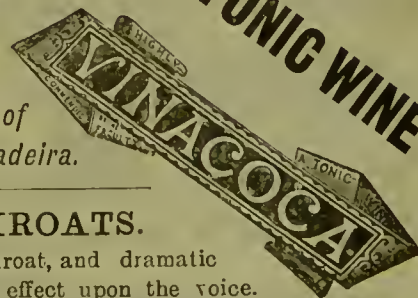
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*Embracing the Therapeutic Properties of  
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TONIC WINE



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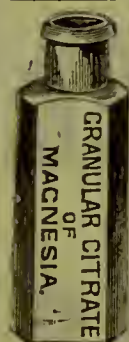
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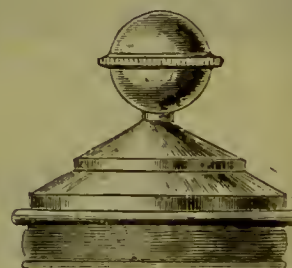
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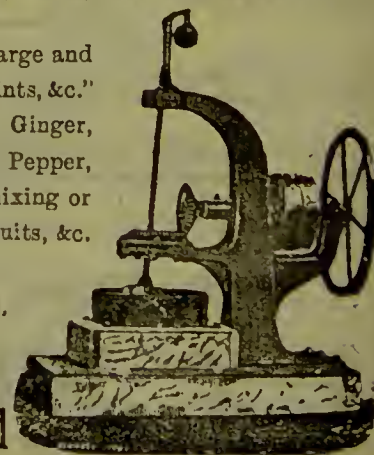
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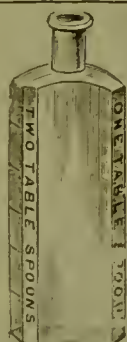


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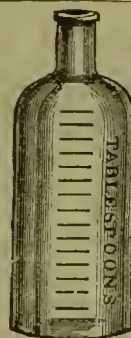
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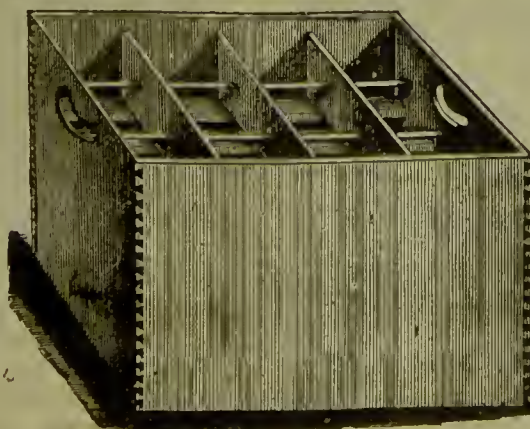
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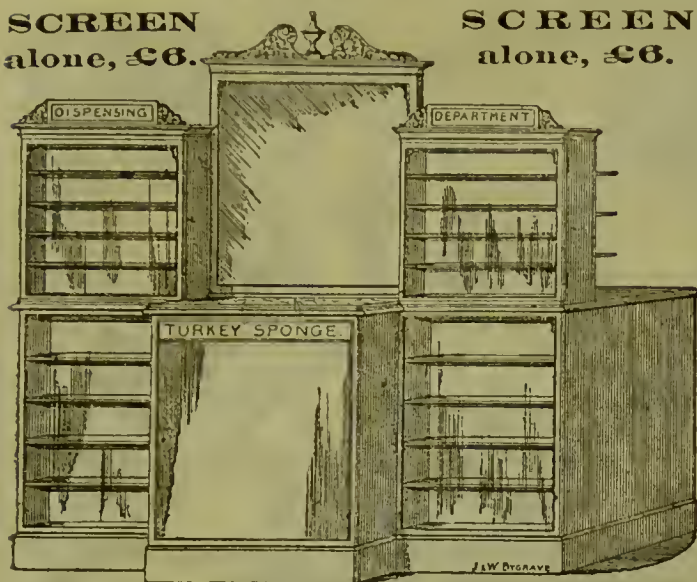
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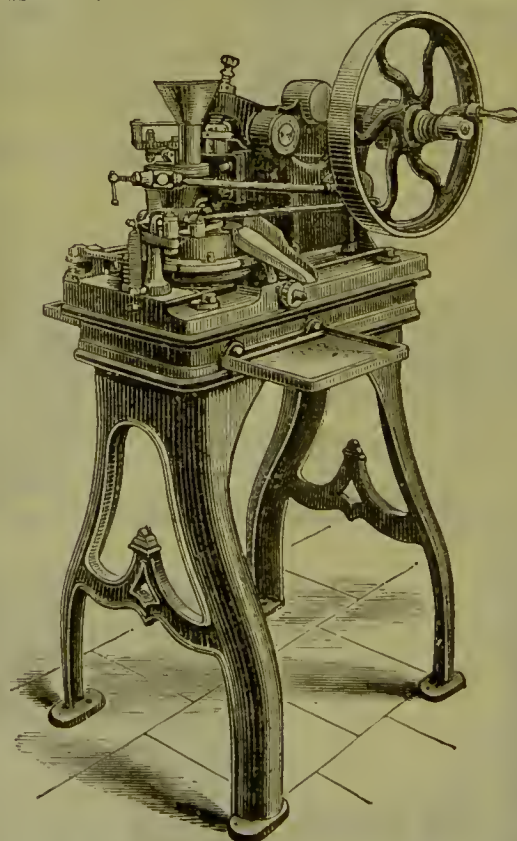
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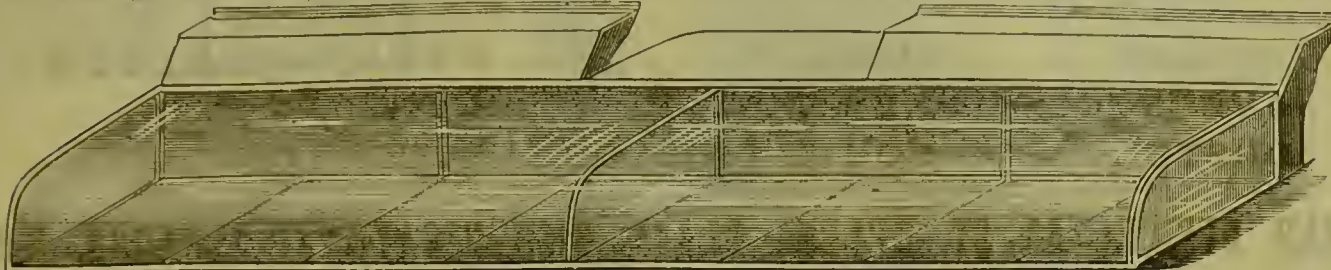


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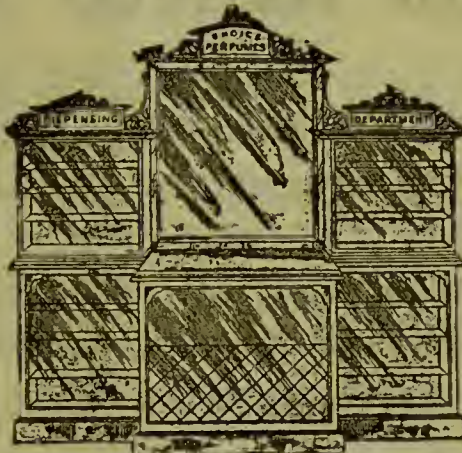


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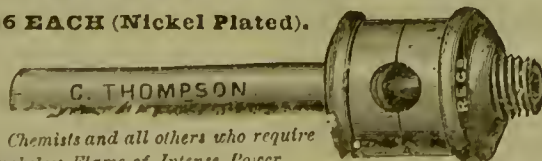
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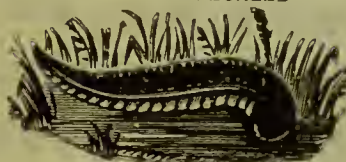
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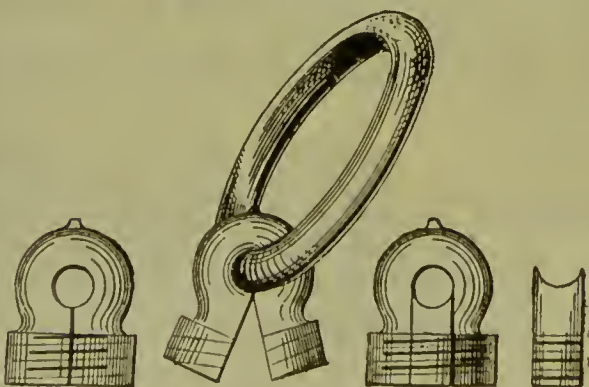


FIG. 1.

FIG. 2.

FIG. 3.

FIG. 4.

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